



LABORATORIES, INC.

Work Order Number: 1720405

Laboratory Documentation Requirements

For Data Validation of

GC Analysis

Metals Analysis (using ppb units)

Volatiles Analysis

Wet Chemistry Analysis

Prepared By

BC Laboratories

For AMEC Environmental & Infrastructure-

5023146096

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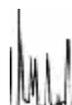


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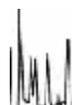


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Case Narrative

Analyses Requested: RSK 175M

Submission Number: 17-20405

Instrument ID: GC-V1

Model: Varian 3400

Column Type: RTX 502.2, 60m x 0.25mm ID, 1.4µm film thickness.

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and extractions took place within holding times.

Calibration: Initial calibration criteria were met. Frequency and accuracy criteria for initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample and Duplicate: Laboratory control sample analysis was performed at the required frequency. All parameters were within QC limits.

Note: The client samples were analyzed on 08/04/2017. QC sample was not analyzed until 08/08/2017 due to oversight. However, samples were not reanalyzed with QC sample due to the sample holding time have exceeded.



Case Narrative

Analyses Requested: Metals
Submission Number: 17-20405

Method 6020-PPB
Instrument ID: Perkins Elmer Élan 6100 (PE-EL2)
Sample Volume(s): 10ml
Digest Volume(s): 10ml

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and preparations took place within holding times.

Calibration: An initial calibration criterion was met. Frequency and accuracy criteria for initial calibration verification and continuing calibration verifications were met.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample: Laboratory control sample analysis was performed at the required frequency. All parameters were within QC limits.

Matrix Spikes and Duplicates: Matrix spike analyses were performed at the required frequencies. All accuracy and precision requirements were met.



Case Narrative

Analyses Requested: 8260
Submission Number: 17-20405

Instrument ID: MS-V5
Model: HP5973/GC6890

Column Type: Rxi R-624 Sil MS 30m x 0.25mm ID, 1.4µm film thickness.

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and extractions took place within holding times.

Calibration: Initial calibration criteria were met. Frequency and accuracy criteria for initial calibration verification (ICV) were met. Frequency and accuracy criteria for continuing calibration verification (CCV) were met except the recoveries for Bromomethane in 1713390-CCV1 and 1713392-CCV1 and the recoveries for Chloromethane and 2,2-Dichloropropane in 1713390-CCV1 were outside QC limits. Ending CCV criteria of fifty percent were met. Any compounds that were flagged, but not required, were not noted here.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample: Laboratory control sample analysis was performed at the required frequency. All parameters for the requested compounds were within QC limits.

Matrix Spikes and Duplicates: Matrix spike analyses were performed at the required frequencies. All accuracy requirements for the requested compounds were met except the matrix spike duplicate recovery for 1,1,1,2-Tetrachloroethane was outside QC limits. All precision requirements for the requested compounds were met.



Case Narrative

Analyses Requested: Air Testing
Submission Number: 17-20405

Method: EPA-TO-15
Instrument ID: MS-A1
Column Type: Capillary GC column 60m x 0.32mm (ID) x 1 μ m

Samples were received at room temperature upon arrival to the BC Laboratories, Inc. facility.

Holding Time: All analyses and extractions took place within holding times.

Calibration: Initial calibration criteria were met. Frequency and accuracy criteria for initial calibration verification (ICV) were met. Frequency and accuracy criteria for continuing calibration verification (CCV) were met. Any compounds that were flagged, but not required, were not noted here.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample and Duplicate: Laboratory control sample analysis was performed at the required frequency. All parameters were within QC limits.



Work Order# 1720605

Canister Preparation Checklist

3 x 200ml/min Flow Controllers
1088, 1098, 1048

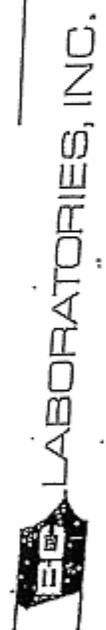
Cleaned: Yes No
 Batch Analysis (< PQL): Yes No
 Evacuated: Yes No

No

Restrictor Type: _____
 Fill Time (min): 200 ml/min
 Client: Amec
 Technician: Marco J. Remy
 Date: 7/16/17

Can Ser.#
 1482
 1366
 1031

Pressure Check
 -30 psig
 -30 psig
 -30 psig





Case Narrative

Analyses Requested: Gen-Chem.
Submission #: 17-20405

Method 120.1
Instrument ID: MET-1
Sample Volume(s): 50ml/50ml

Method 300.0
Instrument ID: IC-5
Sample Volume(s): 20ml/20ml

Method 310.1
Instrument ID: MET-1
Volume(s): 50ml/50ml

Method 353.2
Instrument ID: Kone-1
Sample Volume(s): 20ml/20ml

Method 415.1
Instrument ID: TOC-2
Volume(s): 100ml/100ml

Method SM4500SD
Instrument ID: SPECO6
Volume(s): 25ml/25ml

Samples were received refrigerated to 6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and preparations took place within holding times.

Calibration: Initial calibration criteria were met. Frequency and accuracy criteria for initial and continuing calibration verifications were met.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample: Laboratory control sample analysis was performed at the required frequency. All parameters were within QC limits.

Matrix Spikes and Duplicates: Matrix spike analyses were performed at the required frequencies. All accuracy and precision requirements were met, except EPA Method SM-4500SD batch ID B[H0134-MS1 the matrix spike recovery for Total Sulfide was outside QC limits.



CHAIN OF CUSTODY

DATE: 7/25/2017
COC #: COC170725
PAGE: 1 OF 2

SHIP TO:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Attn: Tim Green
Lab Phone# 801-652-4204

MADEC Group
9177 Sky Park Court
San Diego, CA
(654) 278-3600

1720405

Project Name: Alameda BaseWide
Project Number: 5023146096
Project Manager: Kevin Oltress
Project Contact: Mavis Beaver
Project Phase: 03

Bill To: Amec Foster Wheeler
9210 Sky Park Court, Suite 200
San Diego, CA 92123
Disposal Instructions: LAB
Shipper Method: Courier
Waybill Number: N/A

Table with columns: No., Sample ID, Date & Time Sampled, Matrix, Sample Type, MSMSD, VOCs (EPA 8260B), Diss. Metals As & Cu, Anions- (EPA 300.0), Alkalinity (EPA 310.2), Sulfide (EPA 376.2), TOC (EPA 415.1), Salinity, VOCs - Vinyl Chloride (TO-15), Methods for Analysis, RUSH

Sample's Signature: [Signature]
Relinquished By/Affiliation: [Signature]
Received By: [Signature]
Relinquished By/Affiliation: [Signature]
Received By (LAB): [Signature]

For Lab Use:
Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted:
Cooler Temperature at receipt: °C

Comments:
X=Analyze H=Hold Analysis Request
Report DL/LOD/LOQ with Navy NIRIS valid values
VOC Short List: Benzene and Ethylbenzene Only
Major Cations: Na+, K+, Ca+, Mg+
Anions: Nitrate, Nitrite, Chloride, Sulfate
NUMBER OF COOLERS SENT:



DATE: 7/25/2017
COC #: COC170725
PAGE: 2 OF 2

CHAIN OF CUSTODY

SHIP TO:
BC Laboratories
4100 Alisa Court
Bakersfield, CA 93308
Attn: Tina Green
Lab Phone# 861-852-4204

MMEC Group
9177 Sky Park Court
San Diego, CA
(658) 278-3600

17-20405

Project Name: Alameda Basewide
Project Number: 502314606
Project Manager: Kevin Ornes

Project Contact: Marie Bevier
Phone Number: (503) 658-3400
Project Phase: 03

Bill To: Amtec Foster Wheeler
6210 Sky Park Court, Suite 200
San Diego, CA 92123

Disposal Instructions: LAB
Statement Method: Cooler
Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MSMSD
1	27EW-13_170725	07/25/17 12:50	WG	N	N
2	27EW-16_170725	07/25/17 11:50	WG	N	N
3	27EW-17_170725	07/25/17 12:35	WG	N	N
4	27MW01_170725	07/25/17 12:05	WG	N	Y
5	27MW14_170725	07/25/17 12:55	WG	N	N
6	DUP08_170725	07/25/17 12:00	WG	FD	N
7	EB24_170725	07/25/17 14:05	WG	EB	N
8	EB25_170725	07/25/17 14:10	WG	EB	N
9	EB26_170725	07/25/17 14:15	WG	EB	N
10	TB15_170725	07/25/17 14:00	WG	TB	N
11					
12					

Methods for Analysis: VOCs (EPA 8260B), Diss. Metals As & Cu, Diss. Gases - RSK175, Anions - (EPA 300.0), Alkalinity (EPA 310.2), Sulfide (EPA 376.2), TOC (EPA 415.1), Solidity, VOCs - Vinyl Chloride (TO-15)

For Lab Use:
Does COC match samples: Y or N
Broken Cooler: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____
Cooler Temperature at receipt: _____ °C

Comments:
X-Analyze H-Hold Analysis Request
Report DL/LOD/LOO with Navy NIRIS valid values
VOC Short List: Benzene and Ethylbenzene Only
Major Cations: Na⁺, K⁺, Ca²⁺, Mg²⁺
Anions: Nitrate, Nitrite, Chloride, Sulfate

NUMBER OF COOLERS SENT: _____

SHIP TO: MMEC Group, 9177 Sky Park Court, San Diego, CA (658) 278-3600

Project Contact: Marie Bevier, (503) 658-3400

Project Phase: 03

Project Name: Alameda Basewide, Project Number: 502314606, Project Manager: Kevin Ornes

Bill To: Amtec Foster Wheeler, 6210 Sky Park Court, Suite 200, San Diego, CA 92123

Disposal Instructions: LAB, Statement Method: Cooler, Waybill Number: N/A

DATE: 7/25/2017, COC #: COC170725, PAGE: 2 OF 2

SHIP TO: BC Laboratories, 4100 Alisa Court, Bakersfield, CA 93308, Attn: Tina Green, Lab Phone# 861-852-4204

MMEC Group, 9177 Sky Park Court, San Diego, CA (658) 278-3600

Project Contact: Marie Bevier, (503) 658-3400

Project Phase: 03

Project Name: Alameda Basewide, Project Number: 502314606, Project Manager: Kevin Ornes

Bill To: Amtec Foster Wheeler, 6210 Sky Park Court, Suite 200, San Diego, CA 92123

Disposal Instructions: LAB, Statement Method: Cooler, Waybill Number: N/A

DATE: 7/25/2017, COC #: COC170725, PAGE: 2 OF 2



BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 5

Submission #: 17-20405

SHIPPING INFORMATION: Fed Ex, UPS, Ontrac, Hand Delivery, BC Lab Field Service. SHIPPING CONTAINER: Ice Chest, None, Box, Other. FREE LIQUID: YES, NO, W/S.

Refrigerant: Ice, Blue Ice, None, Other. Comments:

Custody Seals: Ice Chest, Containers, None. Intact? Yes/No.

All samples received? Yes/No. All samples containers intact? Yes/No. Description(s) match COC? Yes/No.

COC Received: YES/NO. Emisivity: 0.95. Container: Evap. Thermometer ID: 208. Date/Time: 1/25/2020. Analyst Init: GSP. Temperature: (A) 3.0 C / (C) 3.3 C.

Table with columns for Sample Containers and Sample Numbers (1-6). Rows include various sample types like QT PE UNPRES, PT INORGANIC CHEMICAL METALS, etc. with handwritten entries like ABC, DEF.

Comments: Sample Numbering Completed By: [Signature] Date/Time: 1/25 2:55. Rev 21 05/23/2016



BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 of 5

Submission #: 17-20405

SHIPPING INFORMATION: Fed Ex, UPS, Ontrac, Hand Delivery, BC Lab Field Service. SHIPPING CONTAINER: Ice Chest, None, Box, Other. FREE LIQUID: YES, NO, W/S.

Refrigerant: Ice, Blue Ice, None, Other. Comments:

Custody Seals: Ice Chest, Containers, None. Intact? Yes, No.

All samples received? Yes, No. All samples containers intact? Yes, No. Description(s) match COC? Yes, No.

COC Received: YES, NO. Emissivity: 0.95. Container: 208. Thermometer ID: 208. Date/Time: 1/25/2020. Analyst Init: 688. Temperature: (A) 3:0 °C / (C) 3.3 °C.

Table with columns for SAMPLE CONTAINERS and SAMPLE NUMBERS (17-22). Rows include various sample types like PE UNPRES, INORGANIC CHEMICAL METALS, etc. Handwritten entries include 'ABC', 'A-I', and 'DEF'.

Comments: Sample Numbering Completed By: [Signature] Date/Time: 1/25 2:35. Rev 21 05/23/2016



BC LABORATORIES INC. COOLER RECEIPT FORM Page 3 of 5

Submission #: 17-20405

SHIPPING INFORMATION
 Fed Ex UPS Ontrac Hand Delivery
 BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER
 Ice Chest None Box
 Other (Specify) _____

FREE LIQUID
 YES NO W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers None Comments: _____
 Intact? Yes No Intact? Yes No

All samples received? Yes No All samples containers intact? Yes No Description(s) match COC? Yes No

COC Received YES NO
 Emissivity: 0.95 Container: PE Thermometer ID: 208 Date/Time: 7/25/2020
 Temperature: (A) 0+7 °C (IC) 1.0 °C Analyst Init: GSP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	4	16	13	15	20	7	8	9	10
PT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES	GH	GH	G	GH	G					
2oz Cr ⁴										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										D
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE	I	I	H	I	H					
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON	J	J	I	J	I					
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- SM										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____
 Sample Numbering Completed By: AM Date/Time: 7.25 2:59 Rev 21 05/23/2016
 A = Actual / C = Corrected [S:\WPDoc\WordPerfect\LAB_COCS\FORMS\ISANREC05 20]



BC LABORATORIES INC. COOLER RECEIPT FORM Page 4 of 5

Submission #: 17-20405

SHIPPING INFORMATION
Fed Ex [] UPS [] Ontrac [] Hand Delivery []
BC Lab Field Service [x] Other [] (Specify) _____

SHIPPING CONTAINER
Ice Chest [x] None [] Box []
Other [] (Specify) _____

FREE LIQUID
YES [] NO []
(W) / S

Refrigerant: Ice [x] Blue Ice [] None [] Other [] Comments:

Custody Seals Ice Chest [] Containers [] None [x]
Intact? Yes [] No [] Intact? Yes [] No []

All samples received? Yes [x] No [] All samples containers intact? Yes [x] No [] Description(s) match COC? Yes [x] No []

COC Received
YES [x] NO []

Emissivity: 0.95 Container: PE Thermometer ID: 208
Temperature: (A) 1.9 °C (10) 22 °C

Date/Time: 1/25/2020
Analyst Init: GSP

Table with columns for Sample Containers and Sample Numbers (514, 13, 17, 18, 19, 111, 114, 117, 19, 2110). Rows include various sample types like QT PE UNPRES, INORGANIC CHEMICAL METALS, etc.

Comments:

Sample Numbering Completed By: A Date/Time: 1/25 2359
A = Actual / C = Corrected



BC LABORATORIES INC. COOLER RECEIPT FORM Page 5 of 5

Submission #: 17-20405

SHIPPING INFORMATION
Fed Ex [] UPS [] Ontrac [] Hand Delivery []
BC Lab Field Service [x] Other [] (Specify)

SHIPPING CONTAINER
Ice Chest [] None [] Box [x]
Other [] (Specify)

FREE LIQUID
YES [] NO []
W / S

Refrigerant: Ice [] Blue Ice [] None [x] Other [] Comments:

Custody Seals Ice Chest [] Containers [] None [x]
Intact? Yes [] No [] Intact? Yes [] No []

All samples received? Yes [x] No [] All samples containers intact? Yes [x] No [] Description(s) match COC? Yes [x] No []

COC Received
YES [x] NO []

Emissivity: Container: Summa Thermometer ID:

Date/Time 1/25/2020

Temperature: (A) Room (C) Temp °C

Analyst Init GEB

Table with columns for Sample Containers and Sample Numbers (1-10). Rows include various container types like QT PE UNPRES, QT INORGANIC CHEMICAL METALS, etc.

Comments:
Sample Numbering Completed By:
A = Actual / C = Corrected

Date/Time: 1/25/2020



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

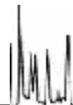


AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20405
Class: GC
Method: RSK-175M



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE
RSK-175M

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Client Sample Id:

Lab Sample Id:

27EW-02_170725

1720405-01

27EW-04_170725

1720405-03

27EW-08_170725

1720405-04

27EW-14_170725

1720405-05

27EW-18_170725

1720405-06

27EW-13_170725

1720405-13

27EW-16_170725

1720405-14

27EW-17_170725

1720405-15

27MW14_170725

1720405-17

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: Sara Guron

Date: 08-25-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS
RSK-175M

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: GC-V1

Analyte	DL	LOD	LOQ	Units
Methane	0.00013	0.0006	0.001	mg/L
Ethane	0.00049	0.001	0.002	mg/L
Ethene	0.00058	0.001	0.002	mg/L



AMEC Environmental & Infrastructure- 9210 Sky Park Court #200 San Diego, CA 92123	Reported: 8/25/2017 9:39:35AM Project: Alameda Project Number: 5023146096 Project Manager: Kevin Olness
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ORGANIC ANALYSIS DATA SHEET
RSK-175M

27EW-02_170725

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>				
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>				
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720405-01</u>	File ID:	<u>04AUG27.D</u>		
Sampled:	<u>07/25/17 09:40</u>	Prepared:	<u>08/03/17 15:25</u>	Analyzed:	<u>08/04/17 11:03</u>		
Solids:		Preparation:	<u>RSK-175M</u>	Initial/Final:	<u>1 ml / 1 ml</u>		
Batch:	<u>B[H0358</u>	Sequence:	<u>1713774</u>	Calibration:	<u>1702007</u>	Instrument:	<u>GC-V1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.26	0.00013	0.00060	0.0010	
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

RSK-175M

27EW-04_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-03 File ID: 04AUG28.D
 Sampled: 07/25/17 11:10 Prepared: 08/03/17 15:25 Analyzed: 08/04/17 11:08
 Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
 Batch: B[H0358 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.015	0.00013	0.00060	0.0010	
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
RSK-175M

27EW-08_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-04 File ID: 04AUG29.D
Sampled: 07/25/17 11:15 Prepared: 08/03/17 15:25 Analyzed: 08/04/17 11:12
Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
Batch: B[H0358 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.024	0.00013	0.00060	0.0010	
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

RSK-175M

27EW-14_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-05 File ID: 04AUG30.D
 Sampled: 07/25/17 11:40 Prepared: 08/03/17 15:25 Analyzed: 08/04/17 11:29
 Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
 Batch: B[H0358 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	10	0.77	0.0013	0.0060	0.010	D
74-84-0	Ethane	10	0.010	0.0049	0.010	0.020	UD
74-85-1	Ethene	10	0.010	0.0058	0.010	0.020	UD

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

RSK-175M

27EW-18_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-06 File ID: 04AUG31.D
 Sampled: 07/25/17 09:35 Prepared: 08/03/17 15:25 Analyzed: 08/04/17 11:50
 Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
 Batch: B[H0358 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.0025	0.00013	0.00060	0.0010	
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

RSK-175M

27EW-13_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-13 File ID: 04AUG32.D
 Sampled: 07/25/17 12:50 Prepared: 08/03/17 15:25 Analyzed: 08/04/17 12:20
 Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
 Batch: B[H0358 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.0049	0.00013	0.00060	0.0010	
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

RSK-175M

27EW-16_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-14 File ID: 04AUG33.D
 Sampled: 07/25/17 11:50 Prepared: 08/03/17 15:25 Analyzed: 08/04/17 12:32
 Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
 Batch: B[H0358 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.0082	0.00013	0.00060	0.0010	
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
RSK-175M

27EW-17_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-15 File ID: 04AUG36.D
 Sampled: 07/25/17 12:35 Prepared: 08/03/17 15:25 Analyzed: 08/04/17 13:37
 Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
 Batch: B[H0358 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	10	0.57	0.0013	0.0060	0.010	D
74-84-0	Ethane	10	0.010	0.0049	0.010	0.020	UD
74-85-1	Ethene	10	0.010	0.0058	0.010	0.020	UD

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

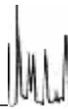
RSK-175M

27MW14_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-17 File ID: 04AUG37.D
 Sampled: 07/25/17 12:55 Prepared: 08/03/17 15:25 Analyzed: 08/04/17 13:48
 Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
 Batch: B[H0358 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.0016	0.00013	0.00060	0.0010	
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**PREPARATION BATCH SUMMARY
RSK-175M**

Laboratory: BC Laboratories SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Batch: B[H0358] Batch Matrix: Water Preparation: RSK-175M

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
27EW-02_170725	1720405-01	04AUG27.D	08/03/17 15:25	
27EW-04_170725	1720405-03	04AUG28.D	08/03/17 15:25	
27EW-08_170725	1720405-04	04AUG29.D	08/03/17 15:25	
27EW-14_170725	1720405-05	04AUG30.D	08/03/17 15:25	
27EW-18_170725	1720405-06	04AUG31.D	08/03/17 15:25	
27EW-13_170725	1720405-13	04AUG32.D	08/03/17 15:25	
27EW-16_170725	1720405-14	04AUG33.D	08/03/17 15:25	
27EW-17_170725	1720405-15	04AUG36.D	08/03/17 15:25	
27MW14_170725	1720405-17	04AUG37.D	08/03/17 15:25	
Blank	B[H0358-BLK1	08AUG08.D	08/03/17 15:25	
LCS	B[H0358-BS1	08AUG09.D	08/03/17 15:25	
LCS Dup	B[H0358-BSD1	08AUG10.D	08/03/17 15:25	



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Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>		
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>		
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[H0358-BLK1</u>	File ID:	<u>08AUG08.D</u>
Prepared:	<u>08/03/17 15:25</u>	Preparation:	<u>RSK-175M</u>	Initial/Final:	<u>1 ml / 1 ml</u>
Analyzed:	<u>08/08/17 12:05</u>	Instrument:	<u>GC-V1</u>		
Batch:	<u>B[H0358</u>	Sequence:	<u>1713976</u>	Calibration:	<u>1702007</u>

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	0.00060	0.00013	0.00060	0.0010	U
74-84-0	Ethane	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	0.0010	0.00058	0.0010	0.0020	U



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Project Manager: Kevin Olness

LCS RECOVERY
RSK-175M

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[H0358] Laboratory ID: B[H0358-BS1]
Preparation: RSK-175M Initial/Final: 1 ml / 1 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Methane	0.010843	0.011226	104	73 - 125
Ethane	0.021736	0.024283	112	74 - 131
Ethene	0.028446	0.029386	103	72 - 133

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Methane	0.010843	0.011201	103	0.228	20	73 - 125
Ethane	0.021736	0.023831	110	1.88	20	74 - 131
Ethene	0.028446	0.027748	97.5	5.73	20	72 - 133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY RSK-175M

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1701454 Instrument: GC-V1
Matrix: Water Calibration: 1702007

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	1701454-CAL4	27JAN02.D	01/27/17 07:43
Cal Standard	1701454-CAL3	27JAN03.D	01/27/17 07:47
Cal Standard	1701454-CAL2	27JAN04.D	01/27/17 07:52
Cal Standard	1701454-CAL1	27JAN05.D	01/27/17 07:56
Initial Cal Check	1701454-ICV1	27JAN06.D	01/27/17 08:40
Initial Cal Blank	1701454-ICB1	27JAN07.D	01/27/17 08:45

AMEC Environmental & Infrastructure-
 9210 Sky Park Court #200
 San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
 Project: Alameda
 Project Number: 5023146096
 Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY RSK-175M

Laboratory: <u>BC Laboratories</u>	SDG: <u>17-20405</u>
Client: <u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project: <u>Alameda</u>
Sequence: <u>1713774</u>	Instrument: <u>GC-V1</u>
Matrix: <u>Water</u>	Calibration: <u>1702007</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713774-ICV1	27JAN06.D	01/27/17 08:40
Initial Cal Blank	1713774-ICB1	27JAN07.D	01/27/17 08:45
Calibration Check	1713774-CCV1	04AUG02.D	08/04/17 06:36
Calibration Blank	1713774-CCB1	04AUG03.D	08/04/17 06:52
Calibration Check	1713774-CCV2	04AUG10.D	08/04/17 07:33
Calibration Blank	1713774-CCB2	04AUG11.D	08/04/17 07:36
Calibration Check	1713774-CCV3	04AUG22.D	08/04/17 10:29
Calibration Blank	1713774-CCB3	04AUG23.D	08/04/17 10:36
27EW-02_170725	1720405-01	04AUG27.D	08/04/17 11:03
27EW-04_170725	1720405-03	04AUG28.D	08/04/17 11:08
27EW-08_170725	1720405-04	04AUG29.D	08/04/17 11:12
27EW-14_170725	1720405-05	04AUG30.D	08/04/17 11:29
27EW-18_170725	1720405-06	04AUG31.D	08/04/17 11:50
27EW-13_170725	1720405-13	04AUG32.D	08/04/17 12:20
27EW-16_170725	1720405-14	04AUG33.D	08/04/17 12:32
Calibration Check	1713774-CCV4	04AUG34.D	08/04/17 12:45
Calibration Blank	1713774-CCB4	04AUG35.D	08/04/17 12:49
27EW-17_170725	1720405-15	04AUG36.D	08/04/17 13:37
27MW14_170725	1720405-17	04AUG37.D	08/04/17 13:48
Calibration Check	1713774-CCV5	04AUG40.D	08/04/17 14:31
Calibration Blank	1713774-CCB5	04AUG41.D	08/04/17 14:39



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Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY
RSK-175M

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713976 Instrument: GC-V1
Matrix: Water Calibration: 1702007

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713976-ICV1	27JAN06.D	01/27/17 08:40
Initial Cal Blank	1713976-ICB1	27JAN07.D	01/27/17 08:45
Calibration Check	1713976-CCV1	08AUG03.D	08/08/17 08:05
Calibration Blank	1713976-CCB1	08AUG04.D	08/08/17 08:14
Blank	B[H0358-BLK1	08AUG08.D	08/08/17 12:05
LCS	B[H0358-BS1	08AUG09.D	08/08/17 12:17
LCS Dup	B[H0358-BSD1	08AUG10.D	08/08/17 12:28
Calibration Check	1713976-CCV2	08AUG11.D	08/08/17 12:41
Calibration Blank	1713976-CCB2	08AUG12.D	08/08/17 13:35
Calibration Check	1713976-CCV3	08AUG19.D	08/08/17 15:19
Calibration Blank	1713976-CCB3	08AUG20.D	08/08/17 15:34



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CONTINUING CALIBRATION CHECK
RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>27JAN06.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1701454</u>	Injection Date:	<u>01/27/17</u>
Lab Sample ID:	<u>1701454-ICV1</u>	Injection Time:	<u>08:40</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	12.174	605292.5	679565.1		12.3	15
Ethane	A	21.736	24.956	580938.9	666976.9		14.8	15
Ethene	A	28.446	31.820	402477.4	450214.1		11.9	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
RSK-175M**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>27JAN06.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>01/27/17</u>
Lab Sample ID:	<u>1713774-ICV1</u>	Injection Time:	<u>08:40</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	12.174	605292.5	679565.1		12.3	15
Ethane	A	21.736	24.956	580938.9	666976.9		14.8	15
Ethene	A	28.446	31.820	402477.4	450214.1		11.9	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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**CONTINUING CALIBRATION CHECK
RSK-175M**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>04AUG02.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>08/04/17</u>
Lab Sample ID:	<u>1713774-CCV1</u>	Injection Time:	<u>06:36</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	9.6314	605292.5	537655.7		-11.2	15
Ethane	A	21.736	23.002	580938.9	614739.6		5.8	15
Ethene	A	28.446	26.449	402477.4	374222		-7.0	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
RSK-175M**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>04AUG10.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>08/04/17</u>
Lab Sample ID:	<u>1713774-CCV2</u>	Injection Time:	<u>07:33</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	9.6811	605292.5	540430		-10.7	15
Ethane	A	21.736	23.268	580938.9	621842.6		7.0	15
Ethene	A	28.446	28.361	402477.4	401280.3		-0.3	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>04AUG22.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>08/04/17</u>
Lab Sample ID:	<u>1713774-CCV3</u>	Injection Time:	<u>10:29</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	9.4113	605292.5	525368.7		-13.2	15
Ethane	A	21.736	23.514	580938.9	628441.8		8.2	15
Ethene	A	28.446	26.706	402477.4	377864.7		-6.1	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
RSK-175M**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>04AUG34.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>08/04/17</u>
Lab Sample ID:	<u>1713774-CCV4</u>	Injection Time:	<u>12:45</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	10.499	605292.5	586080.5		-3.2	15
Ethane	A	21.736	22.929	580938.9	612790.8		5.5	15
Ethene	A	28.446	26.481	402477.4	374668.8		-6.9	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
RSK-175M**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>04AUG40.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>08/04/17</u>
Lab Sample ID:	<u>1713774-CCV5</u>	Injection Time:	<u>14:31</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	10.510	605292.5	586711.2		-3.1	15
Ethane	A	21.736	24.451	580938.9	653468.4		12.5	15
Ethene	A	28.446	28.092	402477.4	397464		-1.2	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>27JAN06.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713976</u>	Injection Date:	<u>01/27/17</u>
Lab Sample ID:	<u>1713976-ICV1</u>	Injection Time:	<u>08:40</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	12.174	605292.5	679565.1		12.3	15
Ethane	A	21.736	24.956	580938.9	666976.9		14.8	15
Ethene	A	28.446	31.820	402477.4	450214.1		11.9	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>08AUG03.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713976</u>	Injection Date:	<u>08/08/17</u>
Lab Sample ID:	<u>1713976-CCV1</u>	Injection Time:	<u>08:05</u>

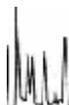
COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	11.461	605292.5	639798.8		5.7	15
Ethane	A	21.736	22.701	580938.9	606701.3		4.4	15
Ethene	A	28.446	27.878	402477.4	394440.7		-2.0	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>08AUG11.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713976</u>	Injection Date:	<u>08/08/17</u>
Lab Sample ID:	<u>1713976-CCV2</u>	Injection Time:	<u>12:41</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	10.424	605292.5	581923.7		-3.9	15
Ethane	A	21.736	22.549	580938.9	602647.7		3.7	15
Ethene	A	28.446	26.992	402477.4	381911		-5.1	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>08AUG19.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713976</u>	Injection Date:	<u>08/08/17</u>
Lab Sample ID:	<u>1713976-CCV3</u>	Injection Time:	<u>15:19</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	11.247	605292.5	627837.5		3.7	15
Ethane	A	21.736	24.044	580938.9	642593.4		10.6	15
Ethene	A	28.446	29.977	402477.4	424140.5		5.4	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA
RSK-175M

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Calibration: 1702007

Instrument: GC-V1

Matrix: Water

Calibration Date: 01/27/17 07:43

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Methane	1.0843	637975.6	10.843	692654	108.43	493653.4	542.15	596887.1				
Ethane	2.1736	586625.4	21.736	661756.1	217.36	501173.7	1086.8	574200.6				
Ethene	2.8446	439934.3	28.446	440075.9	284.46	333630.7	1422.3	396268.7				



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)
RSK-175M

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Calibration: 1702007 Instrument: GC-V1
Matrix: Water Calibration Date: 01/27/17 07:43

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Methane	605292.5	13.89926	0.73	1.372967E-02			20	
Ethane	580938.9	11.31896	2.0825	0.4599198			20	
Ethene	402477.4	12.50156	1.7325	0.5526404			20	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

HOLDING TIME SUMMARY
RSK-175M

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
27EW-02_170725	07/25/17 09:40	07/25/17 22:20	08/03/17 15:25	10.00	14.00	08/04/17 11:03	10.00	14.00	
27EW-04_170725	07/25/17 11:10	07/25/17 22:20	08/03/17 15:25	10.00	14.00	08/04/17 11:08	10.00	14.00	
27EW-08_170725	07/25/17 11:15	07/25/17 22:20	08/03/17 15:25	10.00	14.00	08/04/17 11:12	10.00	14.00	
27EW-14_170725	07/25/17 11:40	07/25/17 22:20	08/03/17 15:25	10.00	14.00	08/04/17 11:29	10.00	14.00	
27EW-18_170725	07/25/17 09:35	07/25/17 22:20	08/03/17 15:25	10.00	14.00	08/04/17 11:50	10.00	14.00	
27EW-13_170725	07/25/17 12:50	07/25/17 22:20	08/03/17 15:25	10.00	14.00	08/04/17 12:20	10.00	14.00	
27EW-16_170725	07/25/17 11:50	07/25/17 22:20	08/03/17 15:25	10.00	14.00	08/04/17 12:32	10.00	14.00	
27EW-17_170725	07/25/17 12:35	07/25/17 22:20	08/03/17 15:25	10.00	14.00	08/04/17 13:37	10.00	14.00	
27MW14_170725	07/25/17 12:55	07/25/17 22:20	08/03/17 15:25	10.00	14.00	08/04/17 13:48	10.00	14.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument GC-V1



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Samples

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG27.D Vial: 27
 Acq On : 4 Aug 2017 11:03 am Operator: JH2
 Sample : 1720405-01 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:12 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

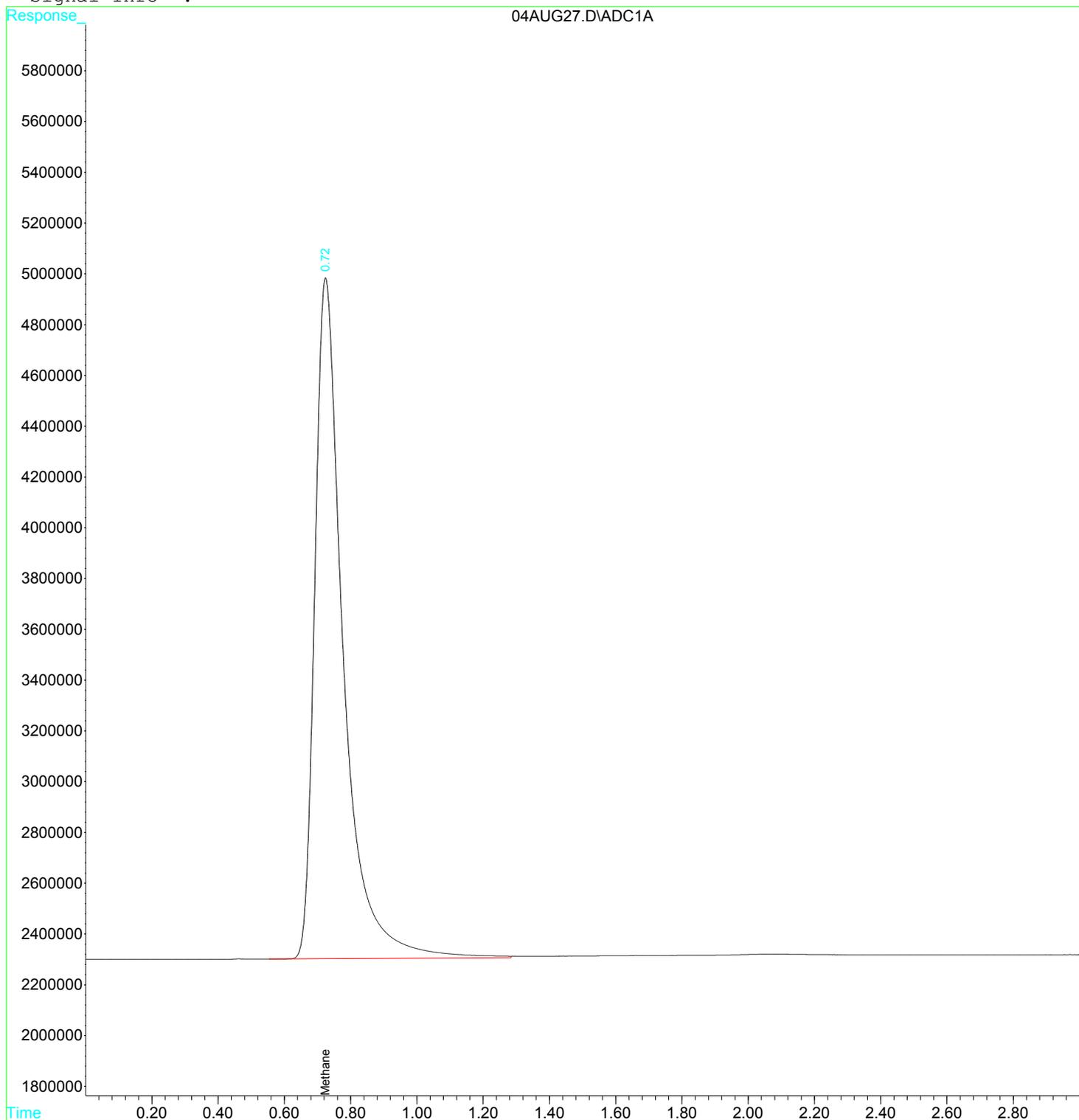
Target Compounds			
1) m Methane	0.72	160103418	264.5058 ug/L
2) m Ethene	0.00	0	N.D. ug/L d
3) m Ethane	0.00	0	N.D. ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG27.D Vial: 27
Acq On : 4 Aug 2017 11:03 am Operator: JH2
Sample : 1720405-01 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:12 2017 Quant Results File: RSK175.RES

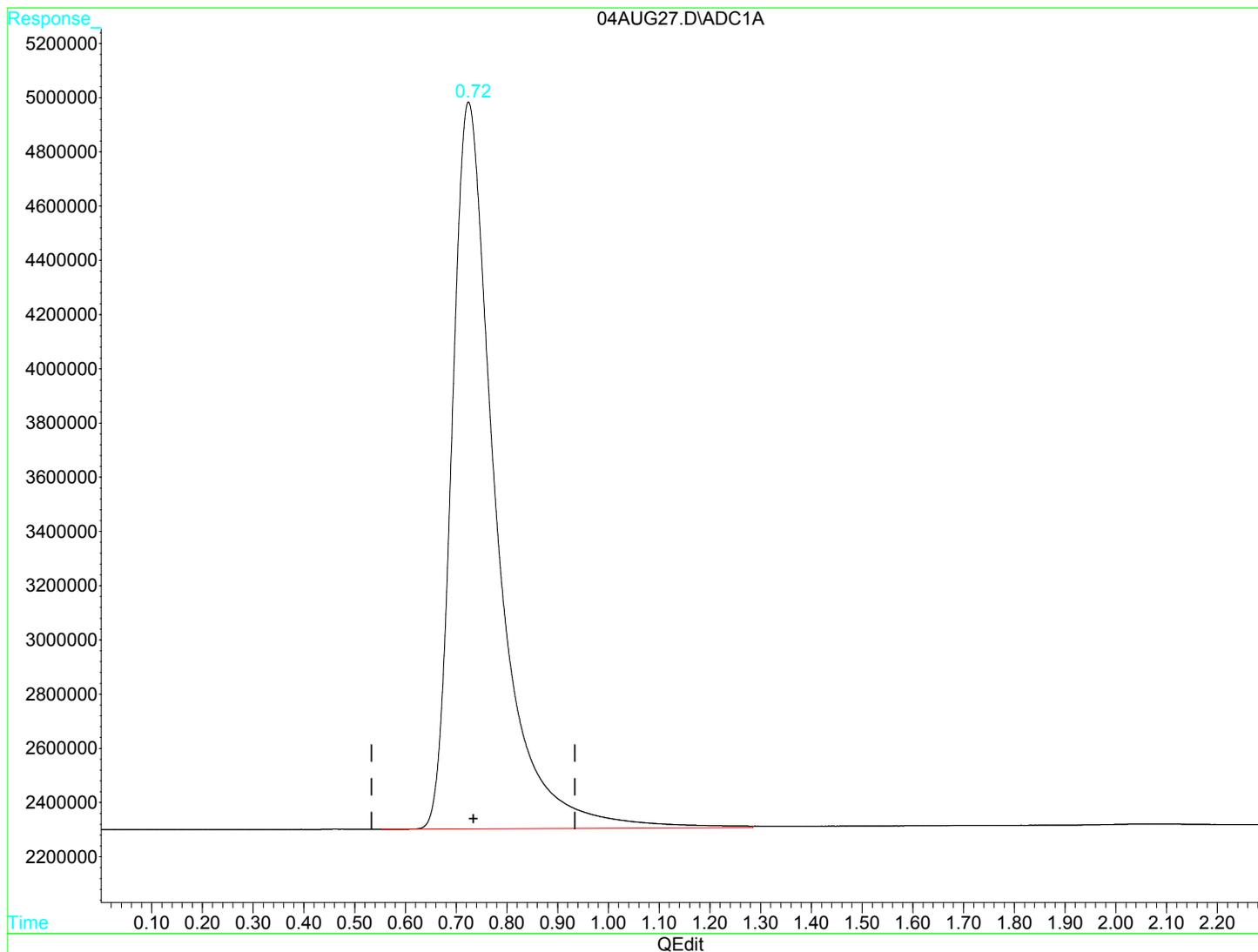
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG27.D Vial: 27
 Acq On : 4 Aug 2017 11:03 am Operator: JH2
 Sample : 1720405-01 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 11:06 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)
 0.72min 264.506ug/L
 response 160103418

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG28.D Vial: 28
 Acq On : 4 Aug 2017 11:08 am Operator: JH2
 Sample : 1720405-03 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:13 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

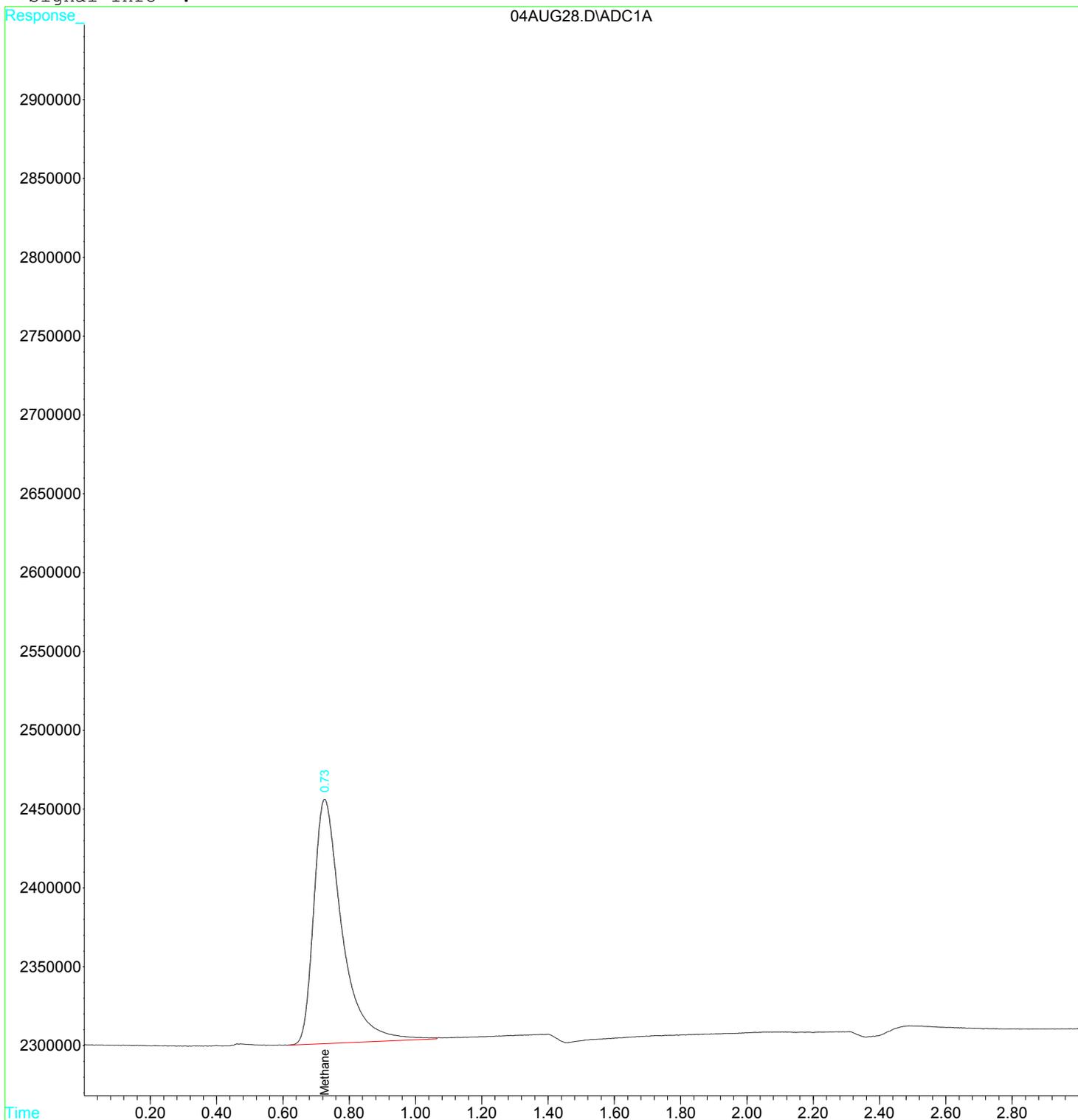
Target Compounds			
1) m Methane	0.73	9179778	15.1659 ug/L m
2) m Ethene	0.00	0	N.D. ug/L
3) m Ethane	0.00	0	N.D. ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG28.D Vial: 28
Acq On : 4 Aug 2017 11:08 am Operator: JH2
Sample : 1720405-03 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:13 2017 Quant Results File: RSK175.RES

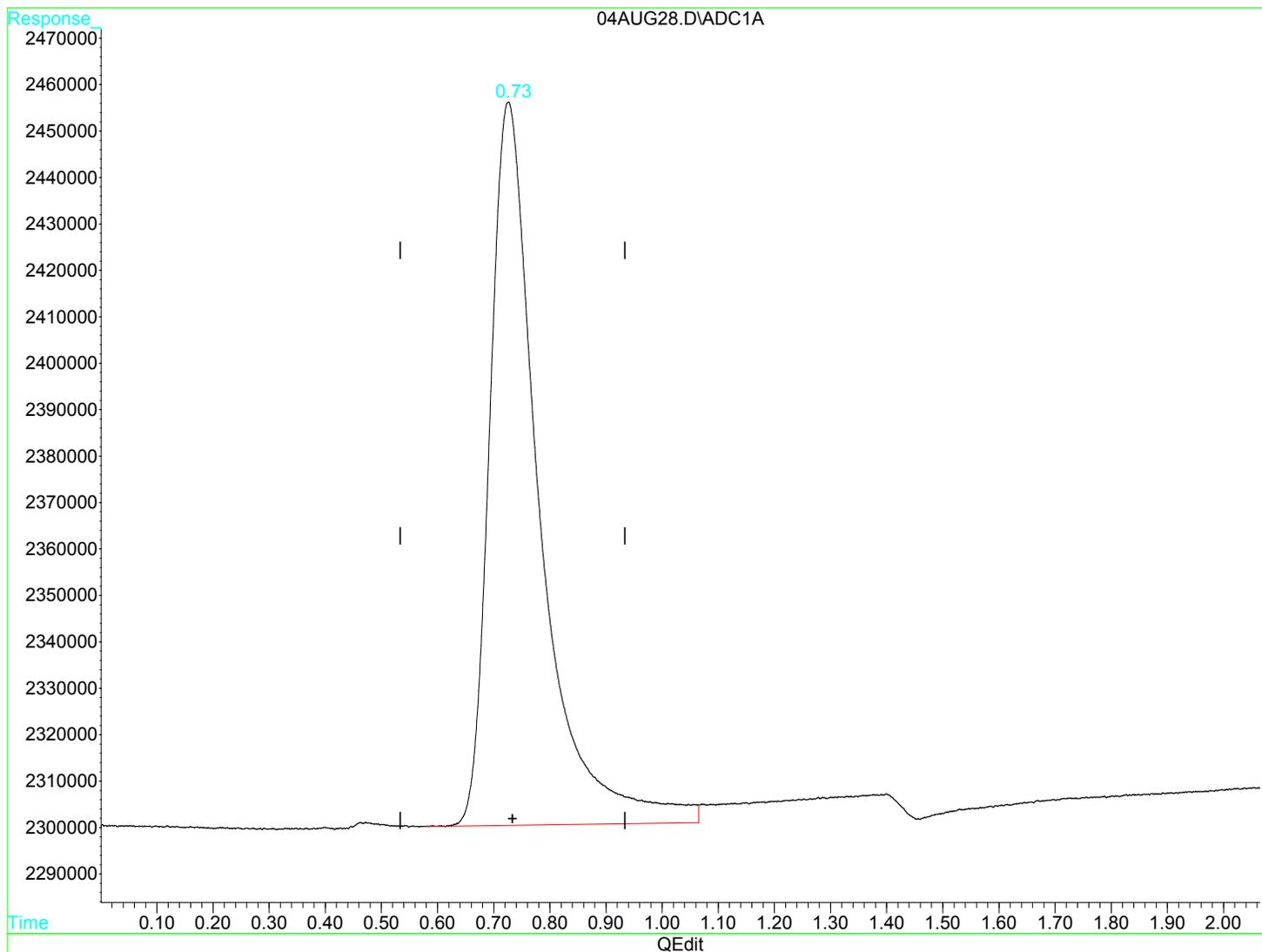
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG28.D Vial: 28
 Acq On : 4 Aug 2017 11:08 am Operator: JH2
 Sample : 1720405-03 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 11:11 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

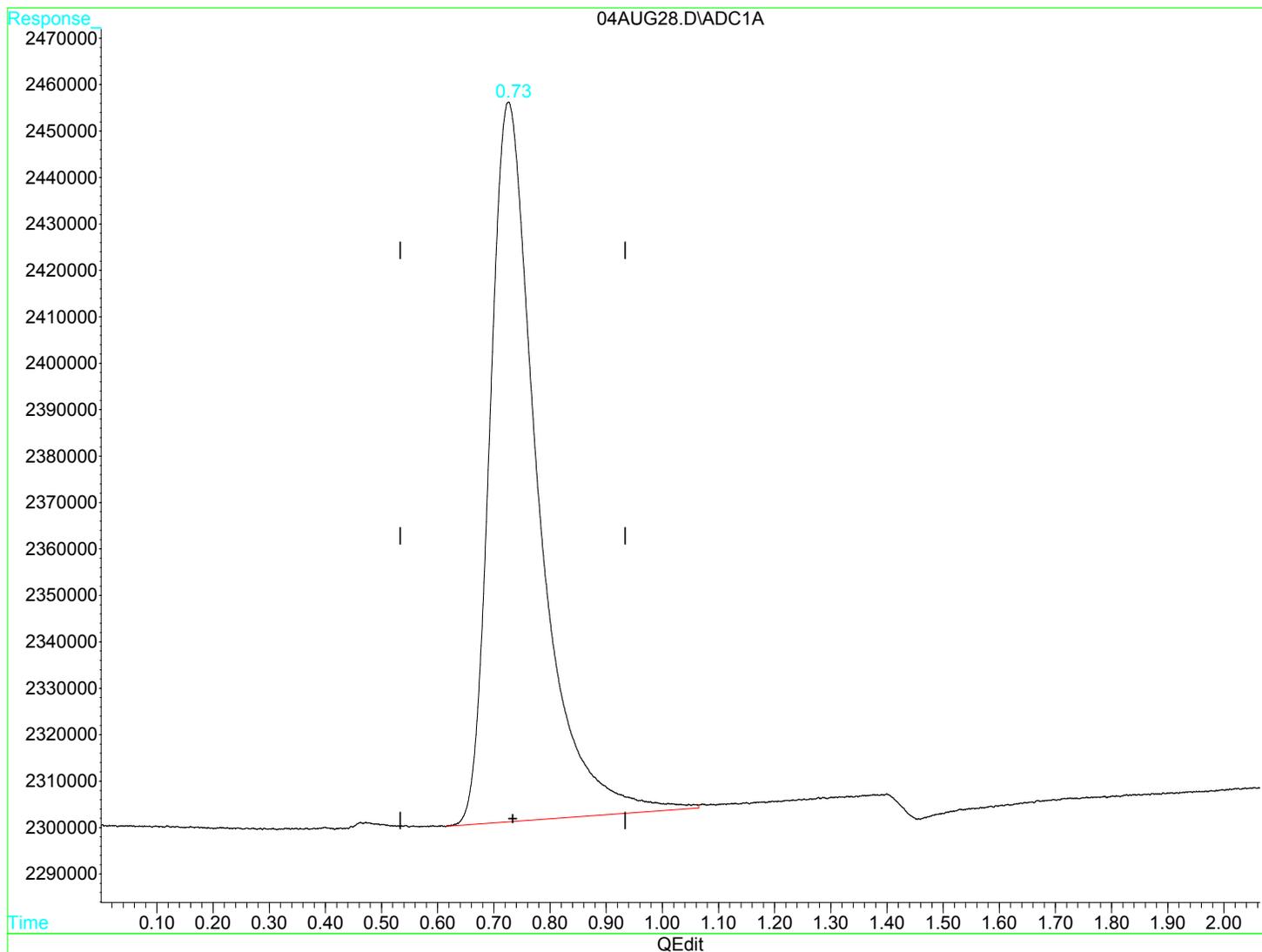


(1) Methane (m)
 0.73min 15.858ug/L
 response 9598480

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG28.D Vial: 28
 Acq On : 4 Aug 2017 11:08 am Operator: JH2
 Sample : 1720405-03 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:13 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)
 0.73min 15.166ug/L m
 response 9179778

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG29.D Vial: 29
 Acq On : 4 Aug 2017 11:12 am Operator: JH2
 Sample : 1720405-04 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:13 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

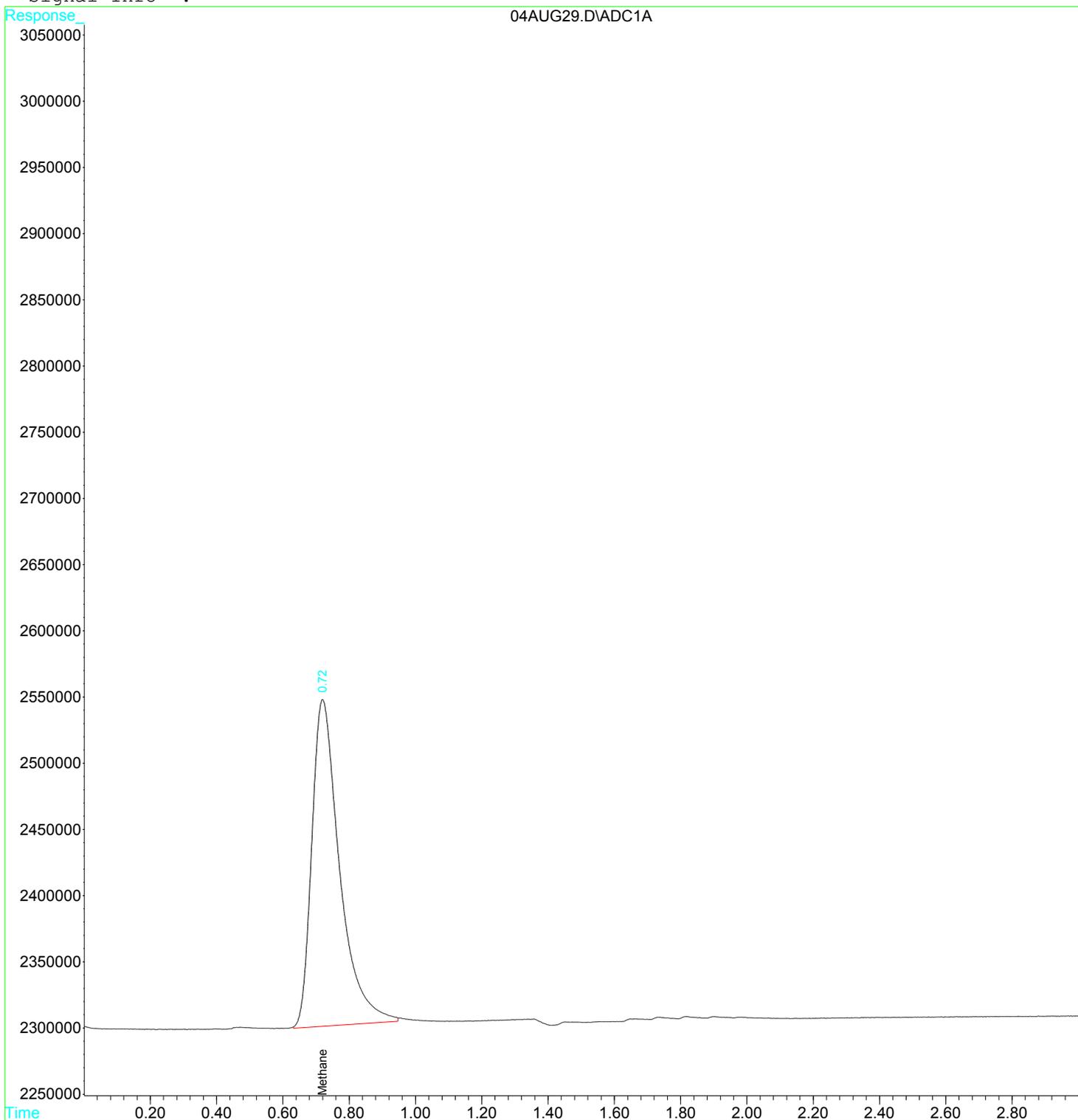
Compound	R.T.	Response	Conc Units

Target Compounds			
1) m Methane	0.72	14377069	23.7523 ug/L m
2) m Ethene	0.00	0	N.D. ug/L d
3) m Ethane	0.00	0	N.D. ug/L d

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG29.D Vial: 29
Acq On : 4 Aug 2017 11:12 am Operator: JH2
Sample : 1720405-04 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:13 2017 Quant Results File: RSK175.RES

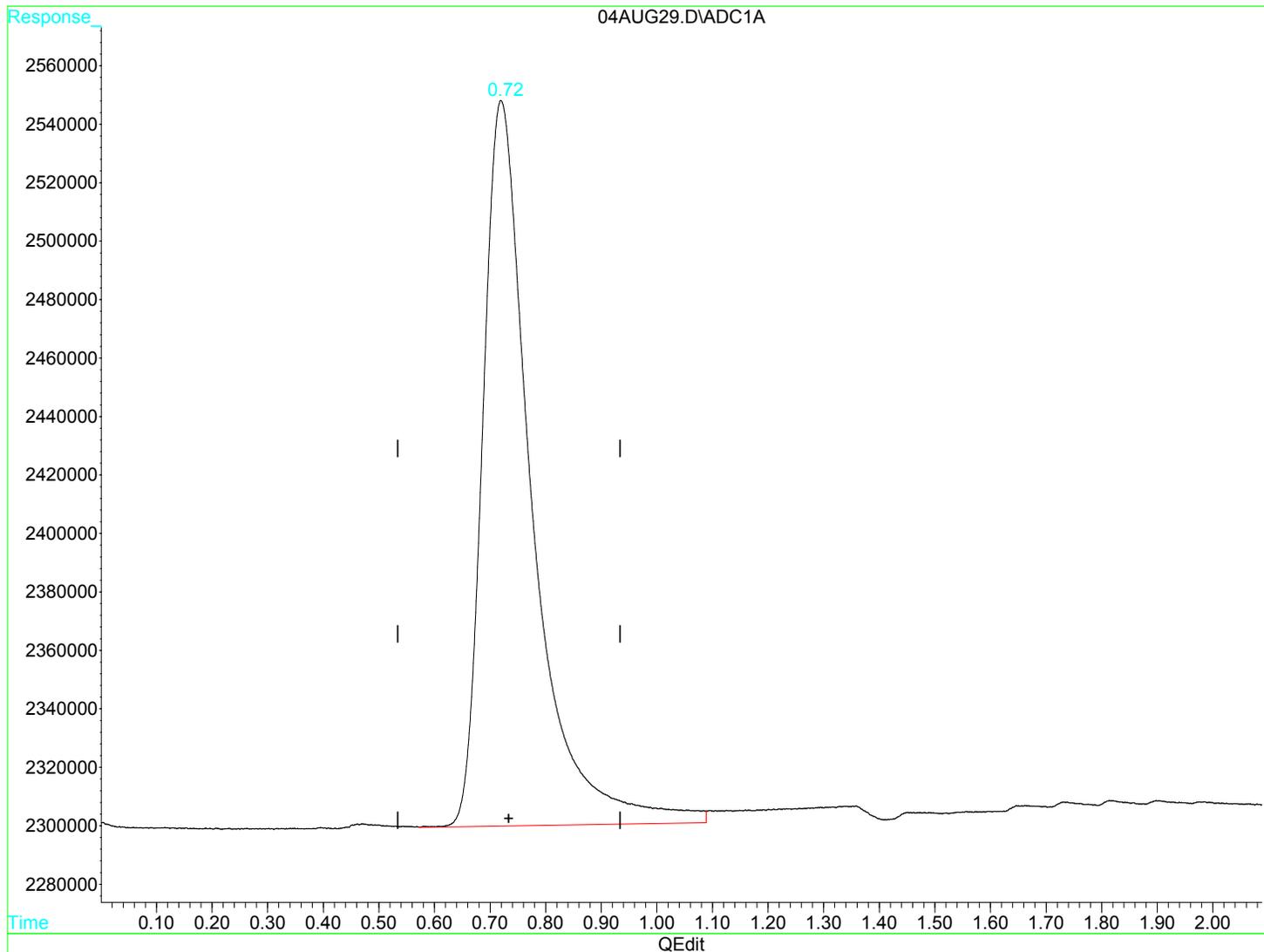
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG29.D Vial: 29
 Acq On : 4 Aug 2017 11:12 am Operator: JH2
 Sample : 1720405-04 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 11:15 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

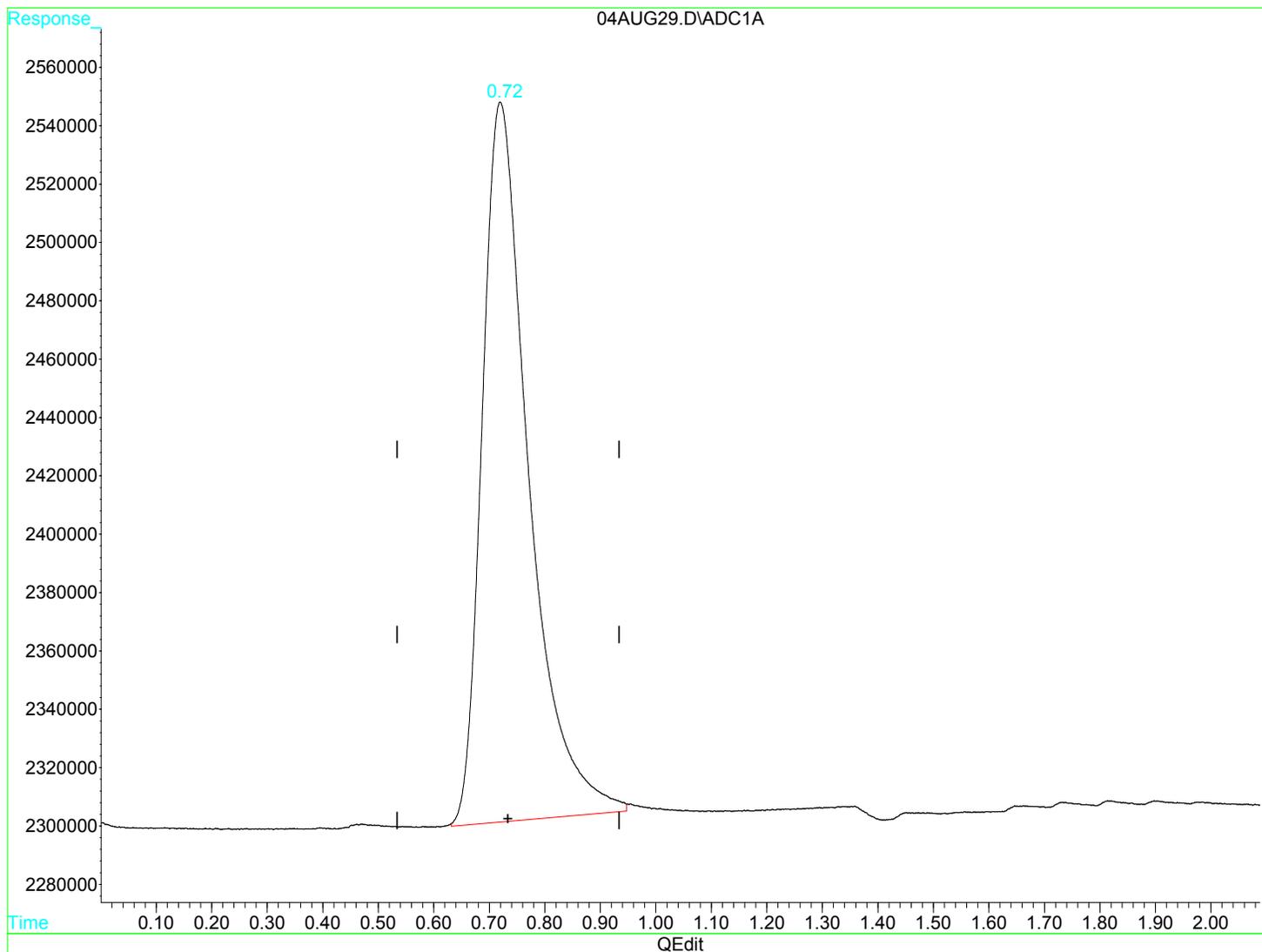


(1) Methane (m)
 0.72min 25.211ug/L
 response 15260322

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG29.D Vial: 29
 Acq On : 4 Aug 2017 11:12 am Operator: JH2
 Sample : 1720405-04 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 11:15 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)
 0.72min 23.752ug/L m
 response 14377069

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG30.D Vial: 30
 Acq On : 4 Aug 2017 11:29 am Operator: JH2
 Sample : 1720405-05 Inst : GC-V1
 Misc : 10 E RSK-175 25uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:14 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

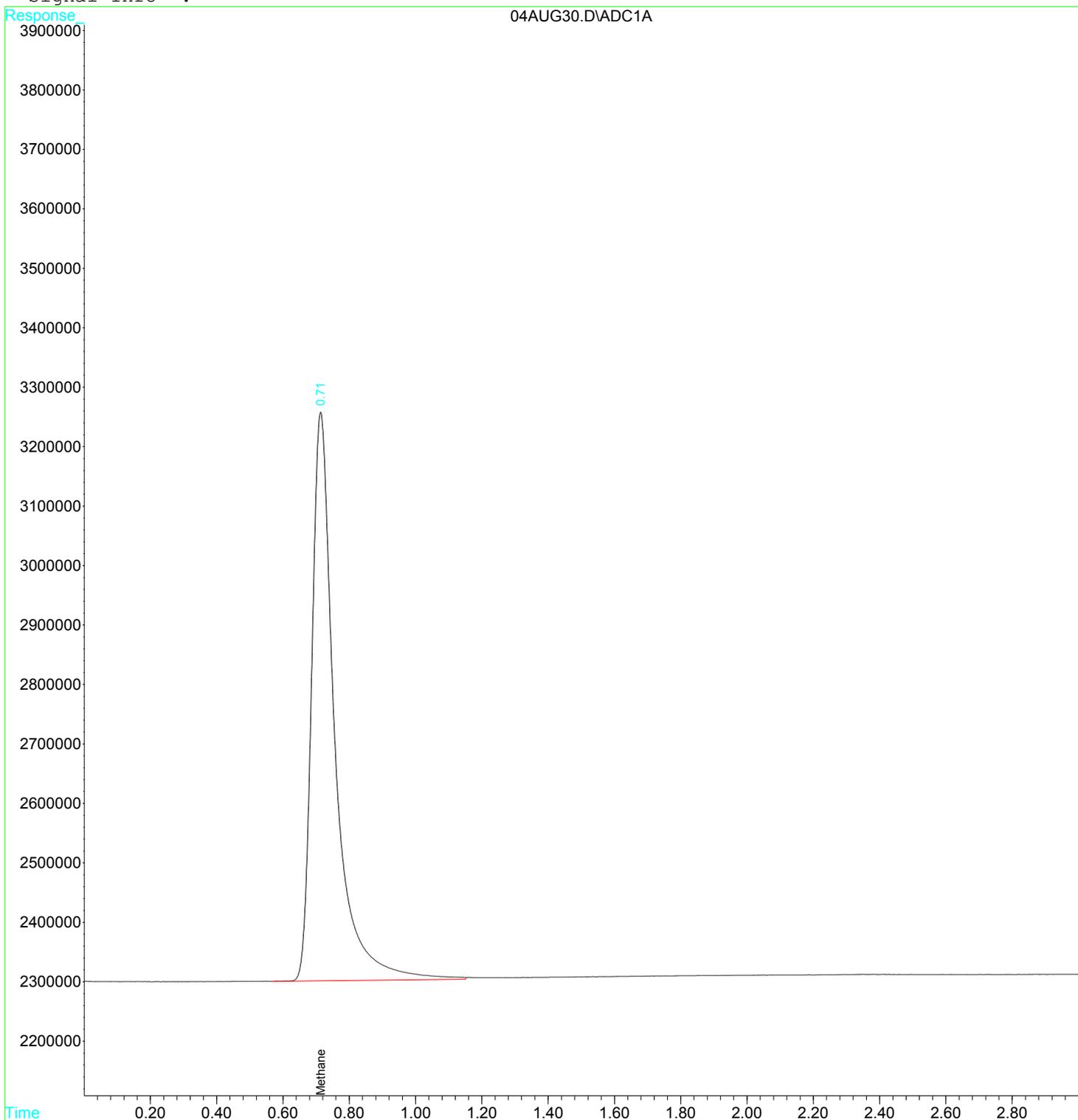
Target Compounds			
1) m Methane	0.71	46458883	76.7544 ug/L
2) m Ethene	0.00	0	N.D. ug/L d
3) m Ethane	0.00	0	N.D. ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG30.D Vial: 30
Acq On : 4 Aug 2017 11:29 am Operator: JH2
Sample : 1720405-05 Inst : GC-V1
Misc : 10 E RSK-175 25uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:14 2017 Quant Results File: RSK175.RES

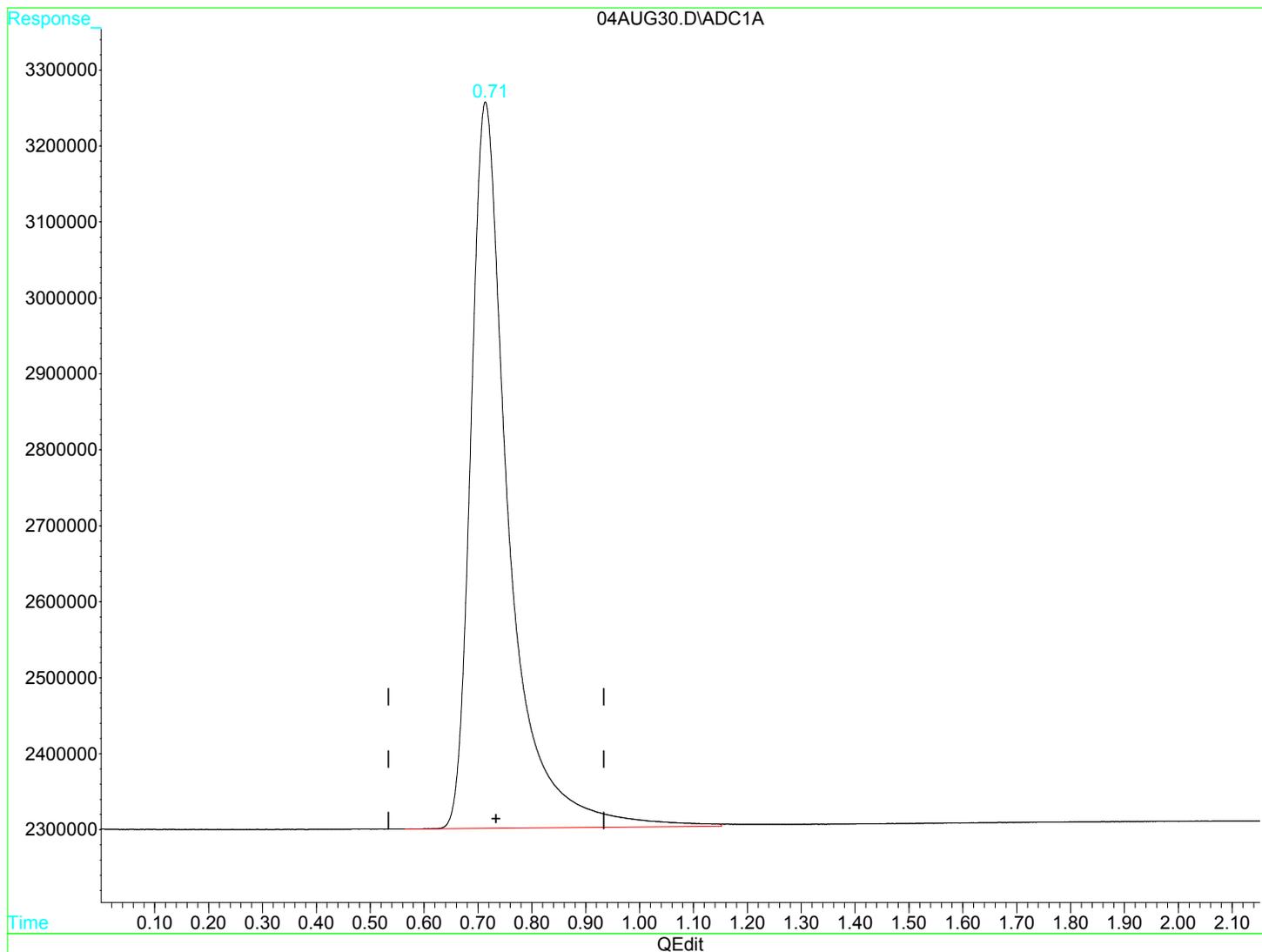
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG30.D Vial: 30
Acq On : 4 Aug 2017 11:29 am Operator: JH2
Sample : 1720405-05 Inst : GC-V1
Misc : 10 E RSK-175 25uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 11:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)
0.71min 76.754ug/L
response 46458883

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG31.D Vial: 31
 Acq On : 4 Aug 2017 11:50 am Operator: JH2
 Sample : 1720405-06 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:14 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

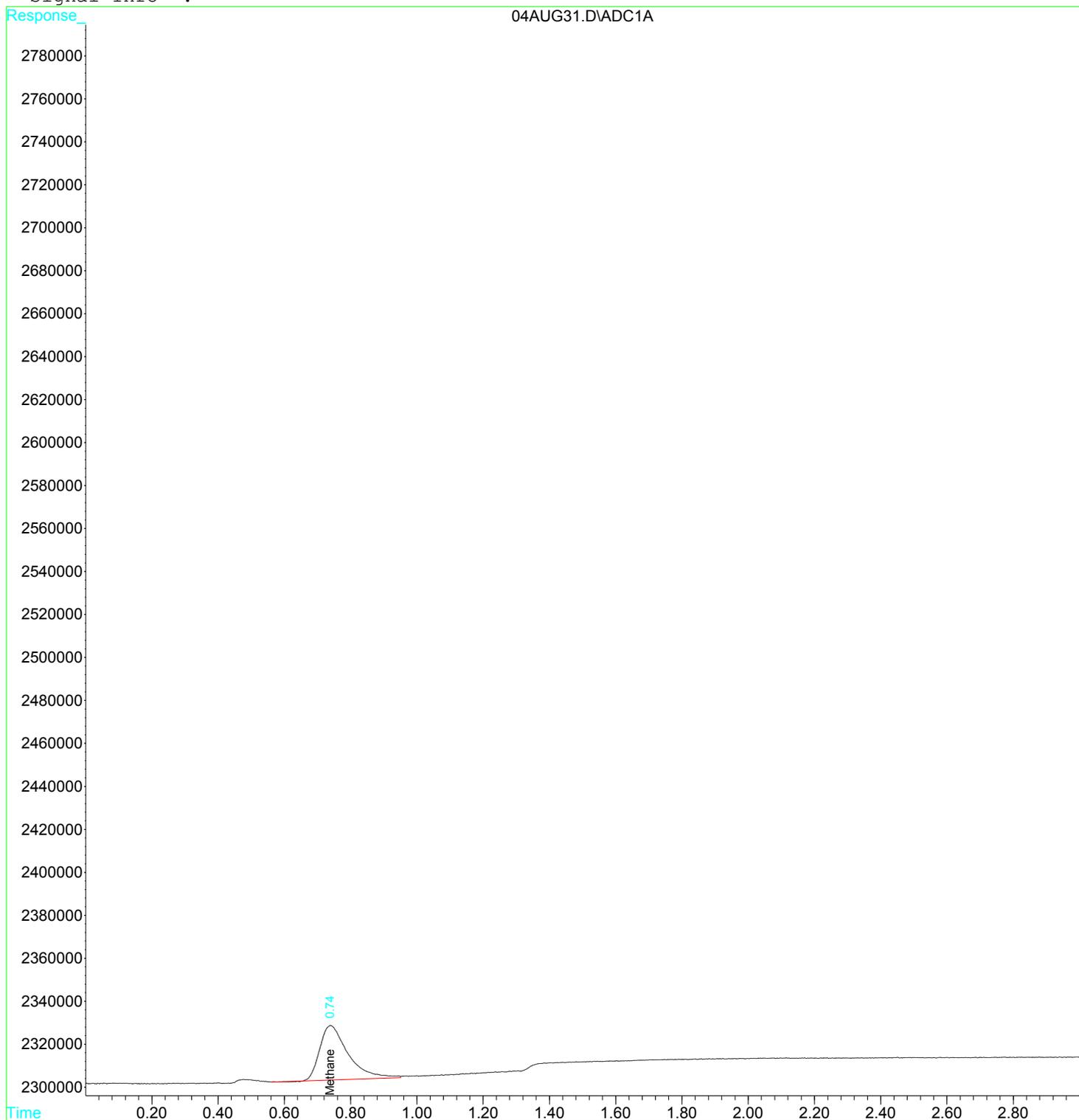
Target Compounds			
1) m Methane	0.74	1502181	2.4817 ug/L
2) m Ethene	0.00	0	N.D. ug/L d
3) m Ethane	0.00	0	N.D. ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG31.D Vial: 31
Acq On : 4 Aug 2017 11:50 am Operator: JH2
Sample : 1720405-06 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:14 2017 Quant Results File: RSK175.RES

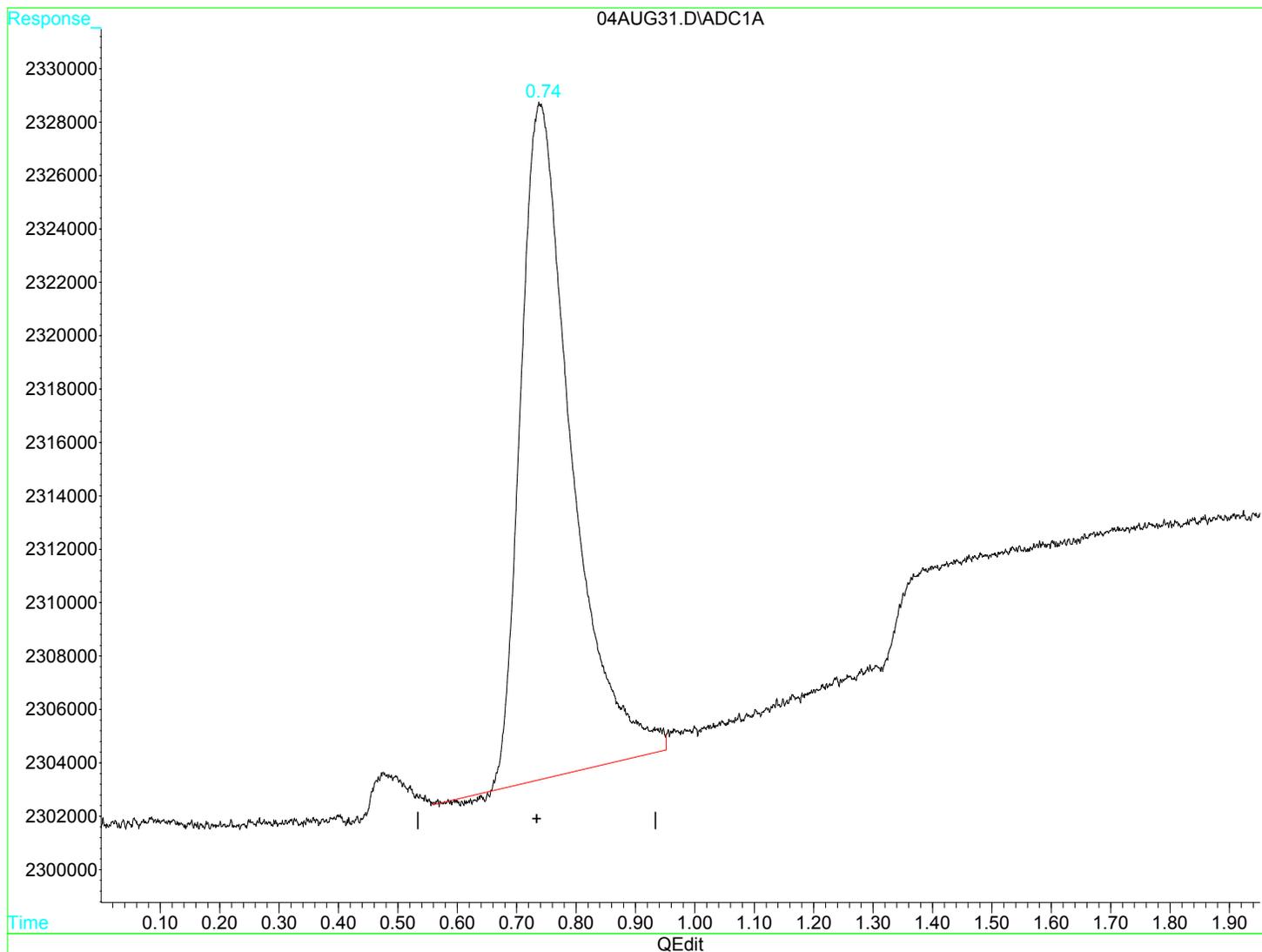
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG31.D Vial: 31
 Acq On : 4 Aug 2017 11:50 am Operator: JH2
 Sample : 1720405-06 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 11:53 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)
 0.74min 2.482ug/L
 response 1502181

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG32.D Vial: 32
 Acq On : 4 Aug 2017 12:20 pm Operator: JH2
 Sample : 1720405-13 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:15 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

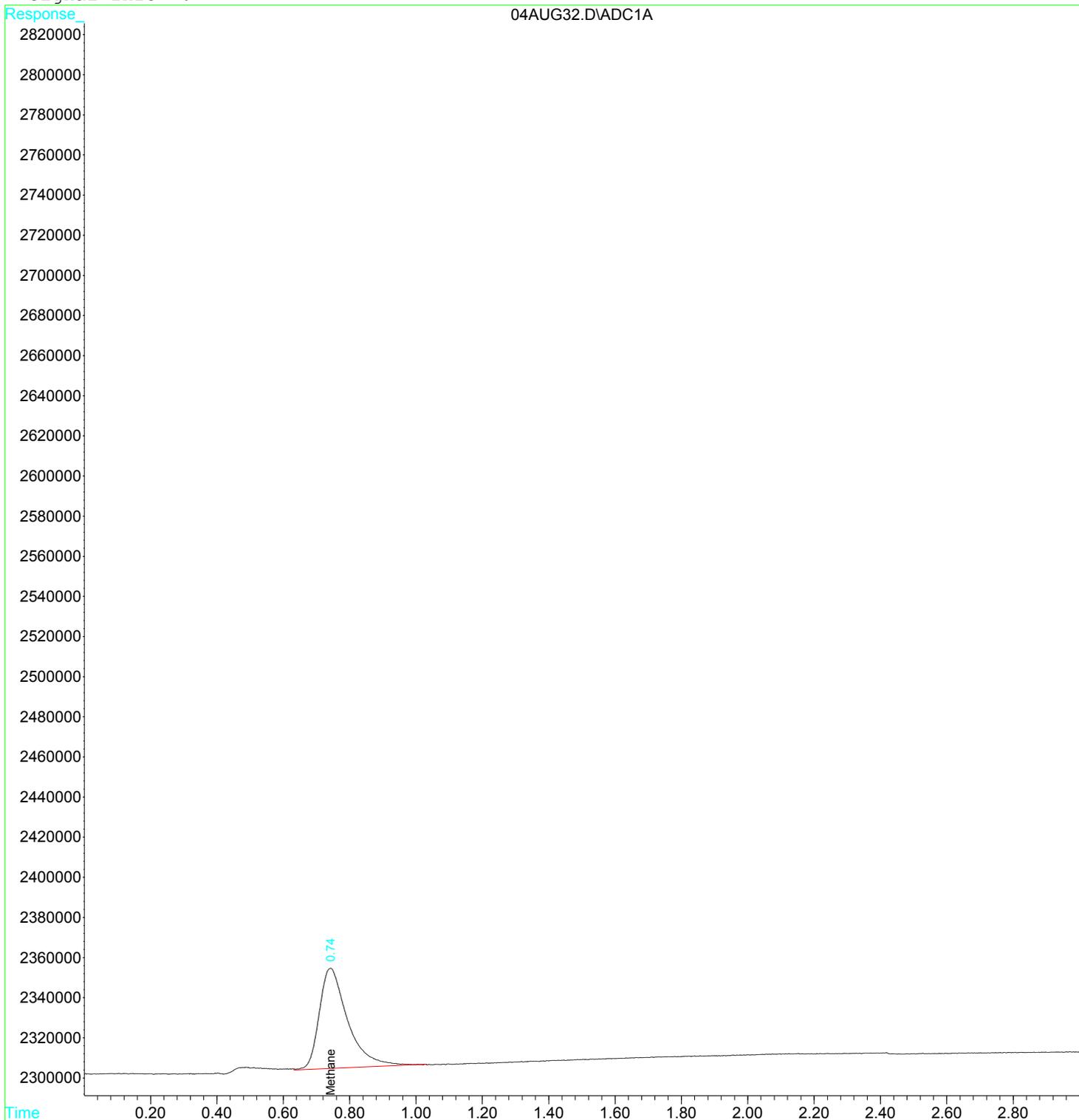
Target Compounds			
1) m Methane	0.74	2952721	4.8782 ug/L m
2) m Ethene	0.00	0	N.D. ug/L
3) m Ethane	0.00	0	N.D. ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG32.D Vial: 32
Acq On : 4 Aug 2017 12:20 pm Operator: JH2
Sample : 1720405-13 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:15 2017 Quant Results File: RSK175.RES

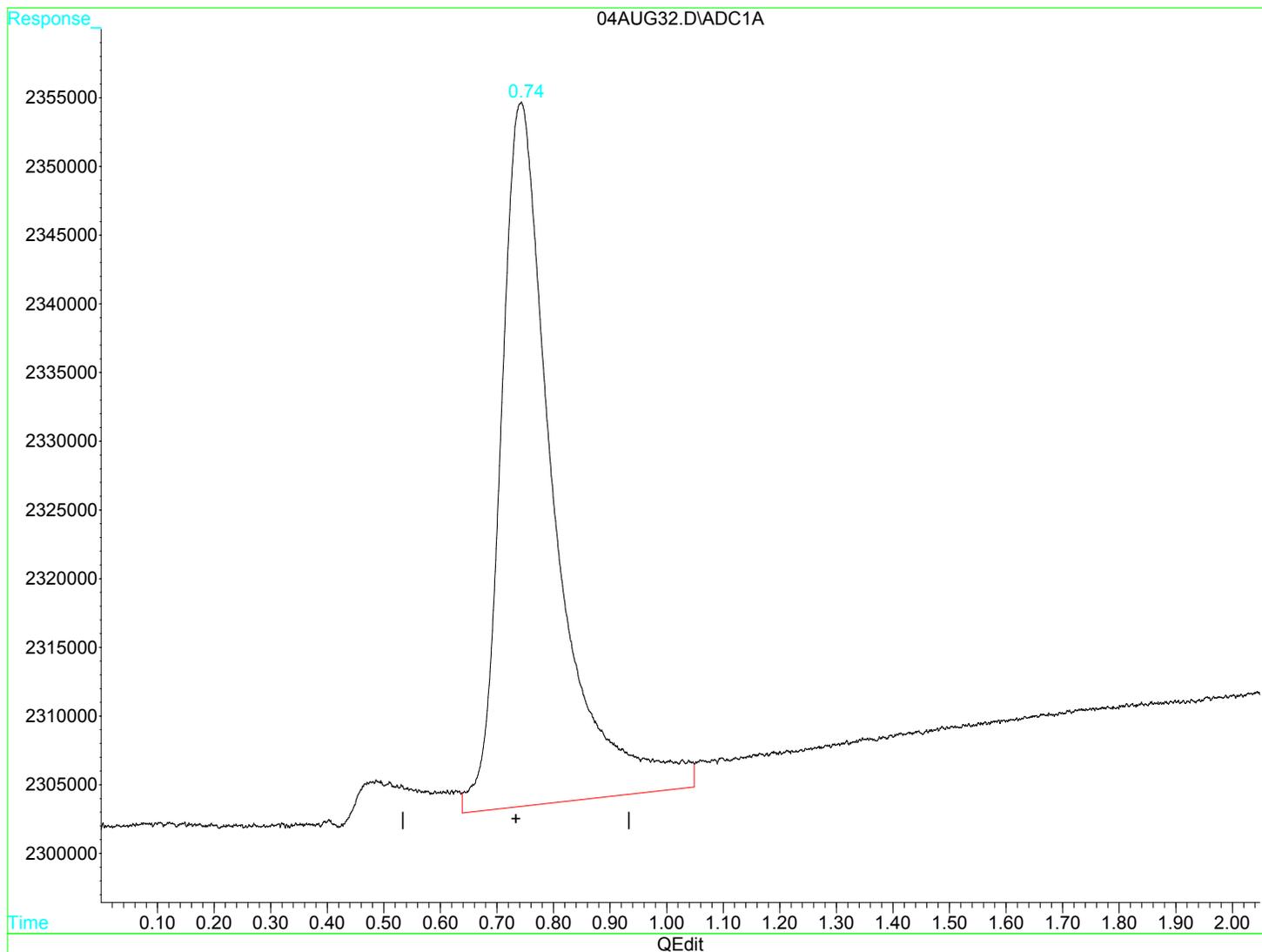
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG32.D Vial: 32
 Acq On : 4 Aug 2017 12:20 pm Operator: JH2
 Sample : 1720405-13 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 12:23 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

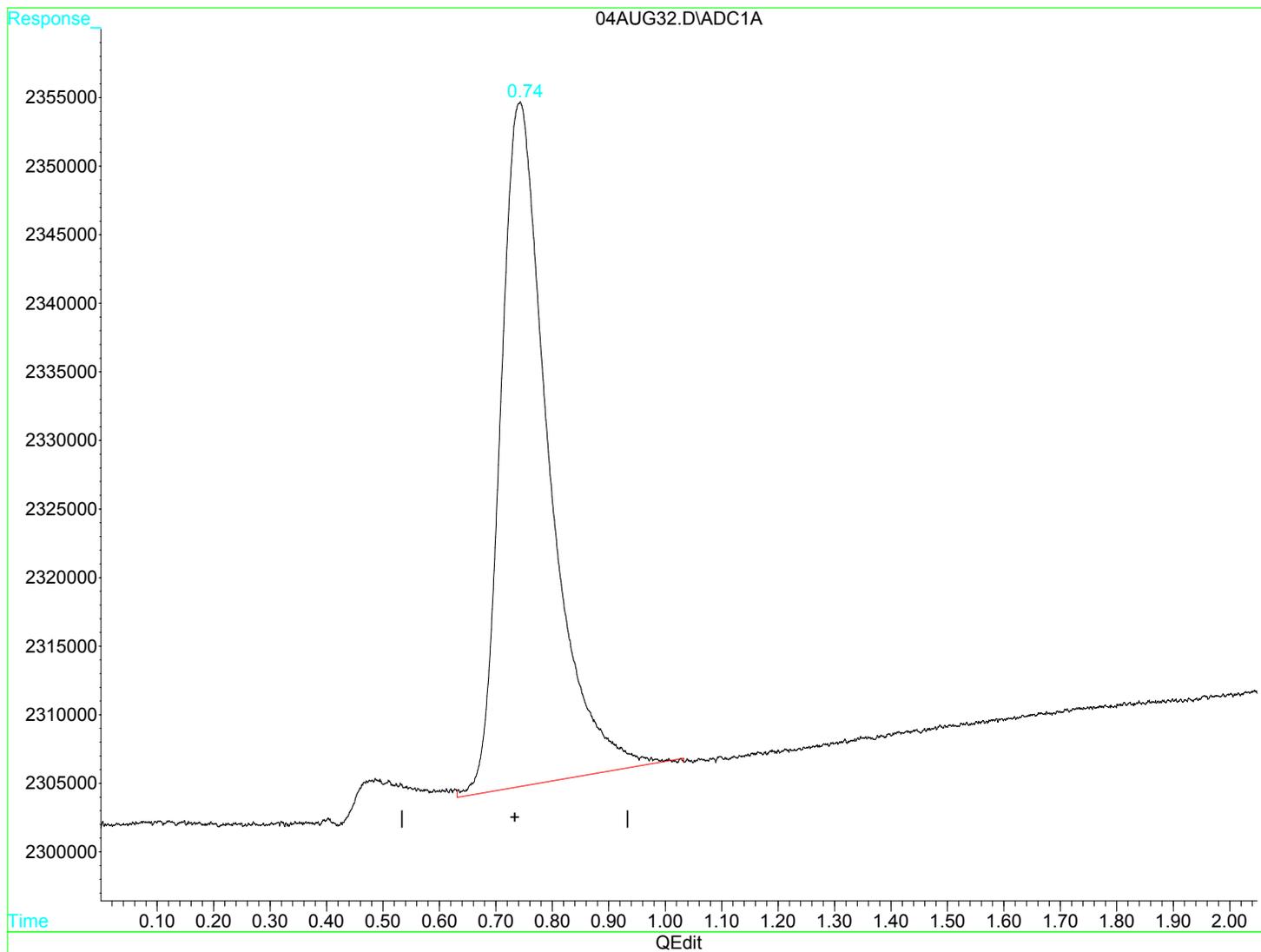


(1) Methane (m)
 0.74min 5.517ug/L
 response 3339538

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG32.D Vial: 32
Acq On : 4 Aug 2017 12:20 pm Operator: JH2
Sample : 1720405-13 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 12:23 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)
0.74min 4.878ug/L m
response 2952721

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG33.D Vial: 33
 Acq On : 4 Aug 2017 12:32 pm Operator: JH2
 Sample : 1720405-14 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:15 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

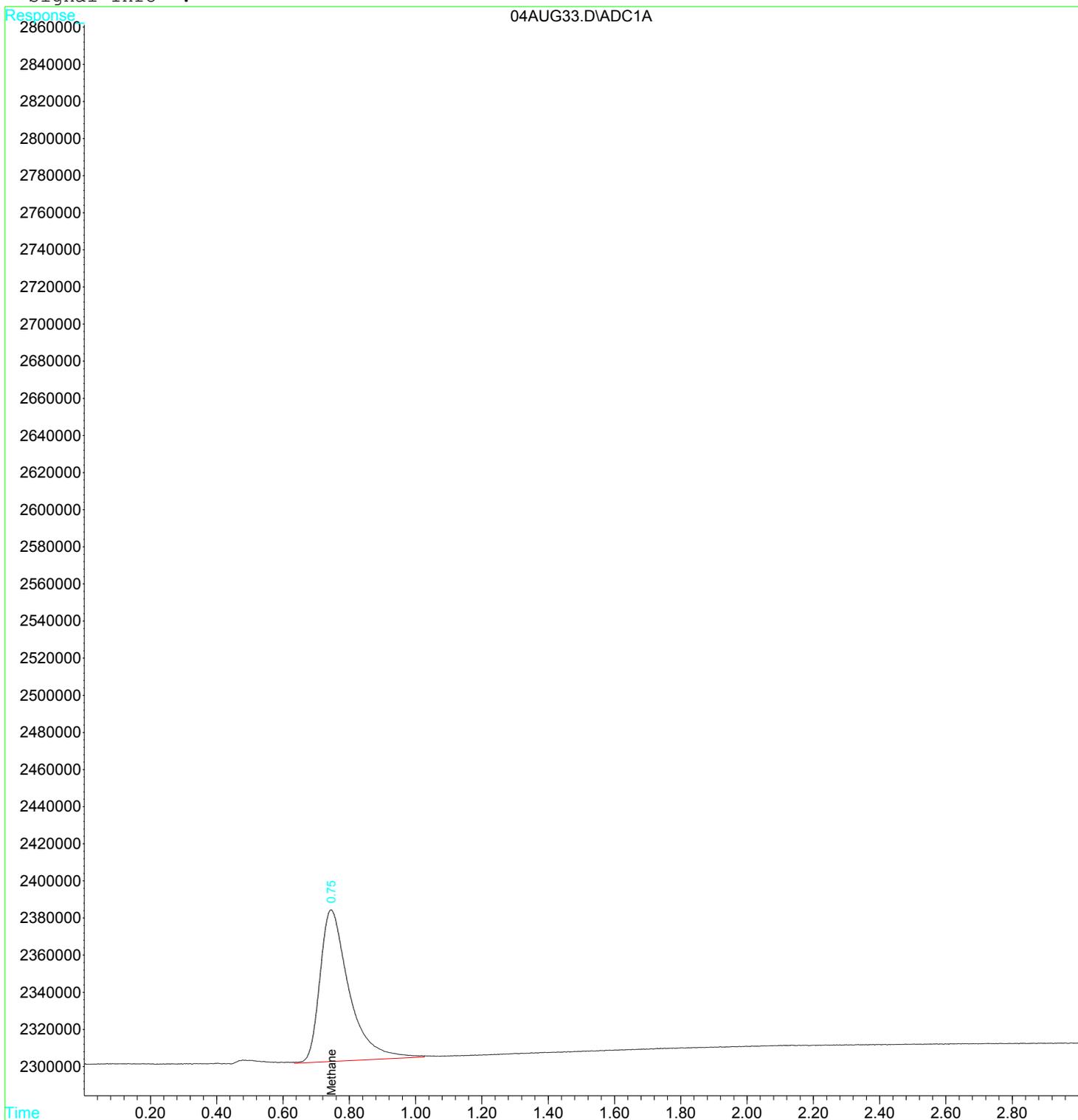
Compound	R.T.	Response	Conc Units

Target Compounds			
1) m Methane	0.75	4978689	8.2253 ug/L m
2) m Ethene	0.00	0	N.D. ug/L
3) m Ethane	0.00	0	N.D. ug/L d

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG33.D Vial: 33
Acq On : 4 Aug 2017 12:32 pm Operator: JH2
Sample : 1720405-14 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:15 2017 Quant Results File: RSK175.RES

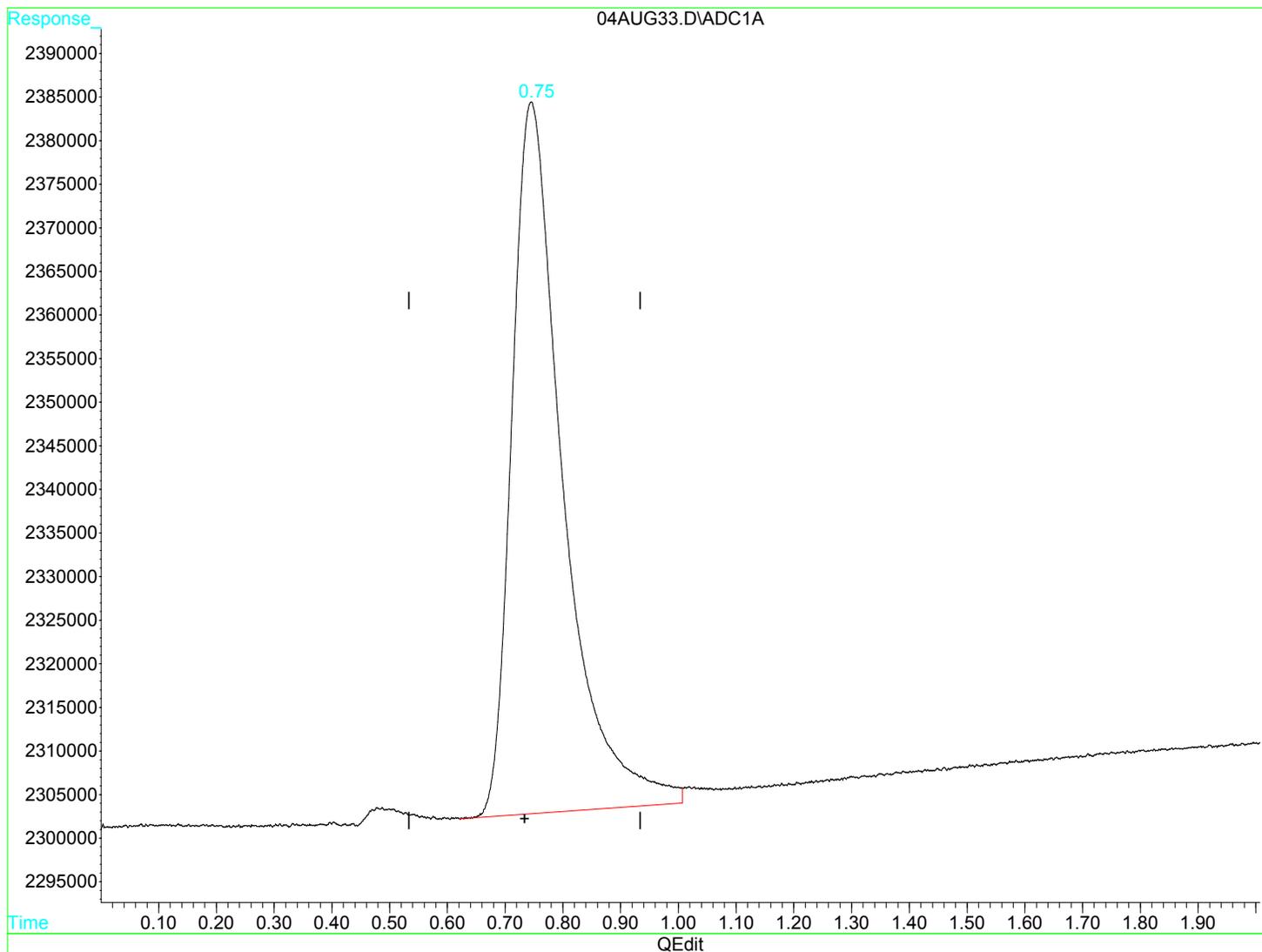
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG33.D Vial: 33
Acq On : 4 Aug 2017 12:32 pm Operator: JH2
Sample : 1720405-14 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 12:35 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration

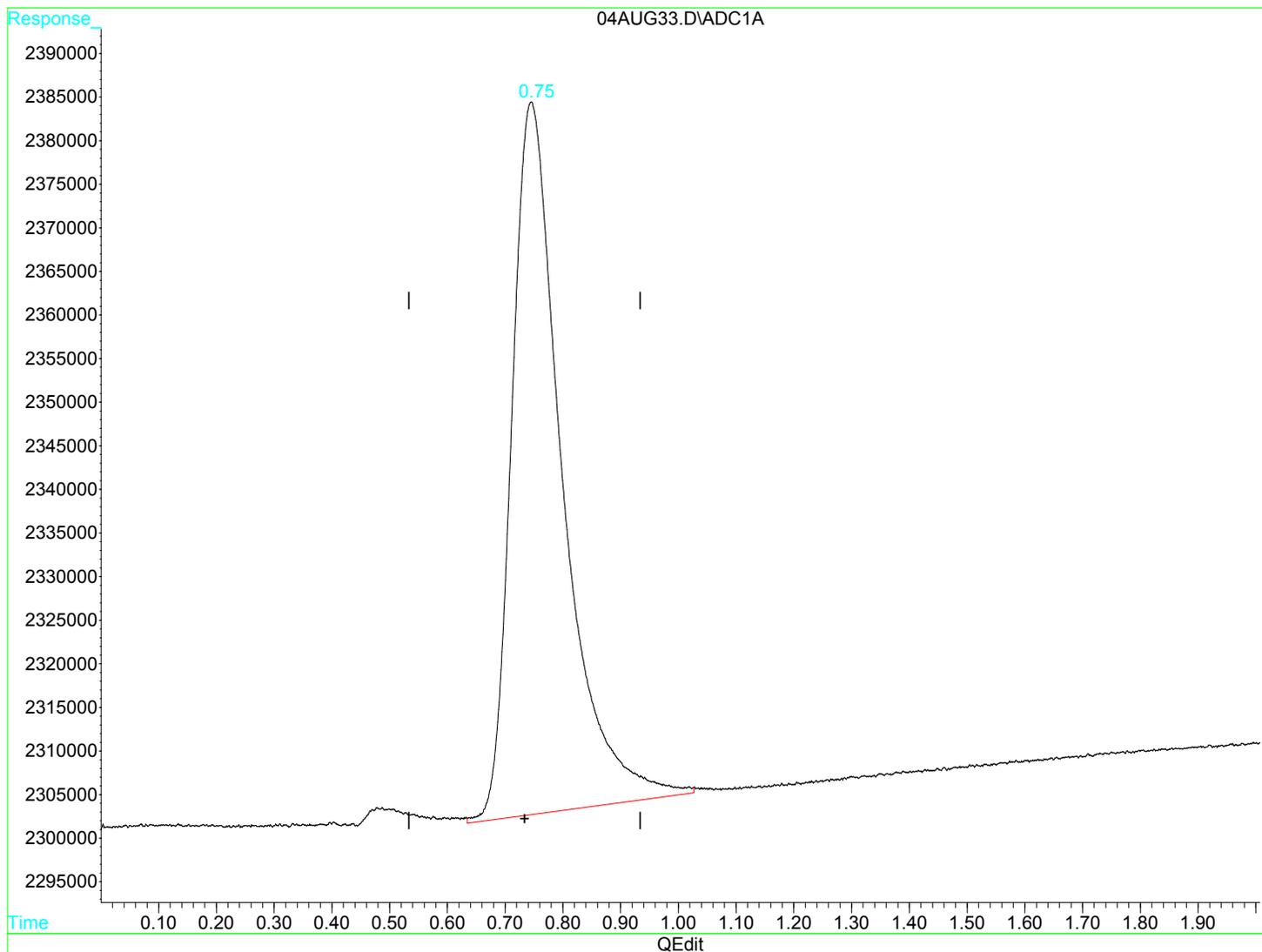


(1) Methane (m)
0.75min 8.287ug/L
response 5016293

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG33.D Vial: 33
 Acq On : 4 Aug 2017 12:32 pm Operator: JH2
 Sample : 1720405-14 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 12:35 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)
 0.75min 8.225ug/L m
 response 4978689

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG36.D Vial: 36
 Acq On : 4 Aug 2017 1:37 pm Operator: JH2
 Sample : 1720405-15 Inst : GC-V1
 Misc : 10 E RSK-175 25uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:17 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

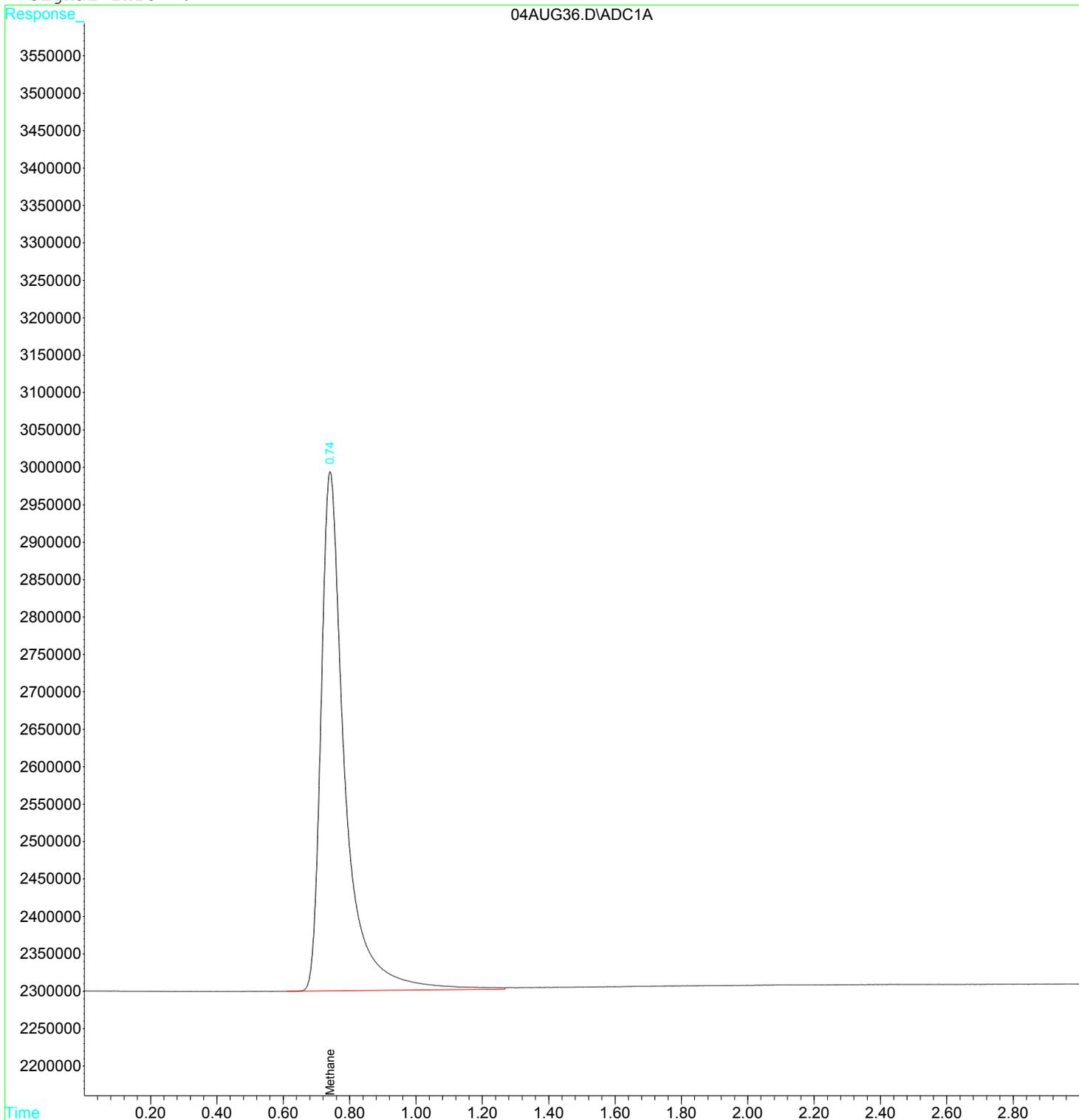
Target Compounds			
1) m Methane	0.74	34592944	57.1508 ug/L
2) m Ethene	0.00	0	N.D. ug/L d
3) m Ethane	0.00	0	N.D. ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG36.D Vial: 36
Acq On : 4 Aug 2017 1:37 pm Operator: JH2
Sample : 1720405-15 Inst : GC-V1
Misc : 10 E RSK-175 25uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:17 2017 Quant Results File: RSK175.RES

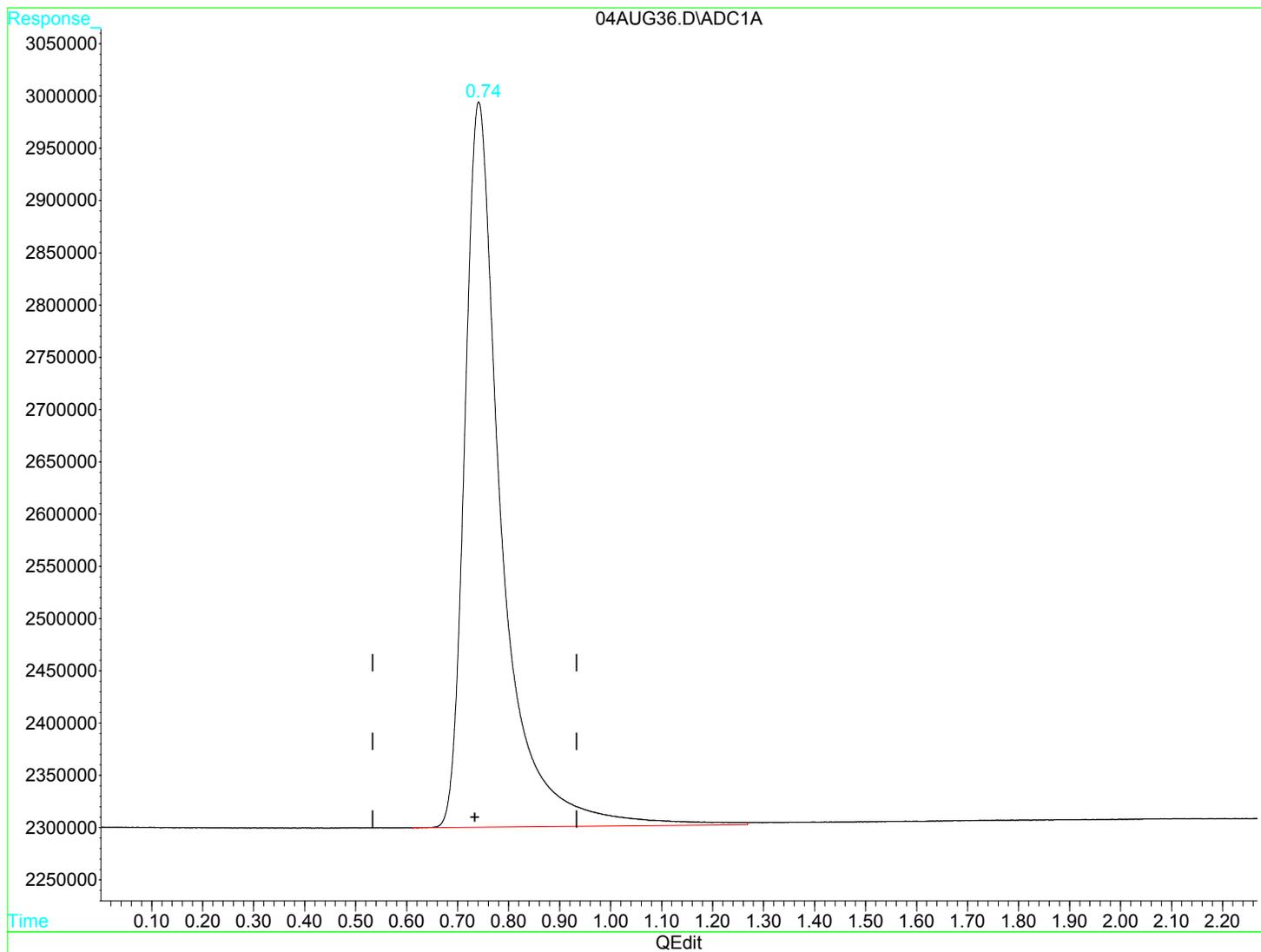
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG36.D Vial: 36
Acq On : 4 Aug 2017 1:37 pm Operator: JH2
Sample : 1720405-15 Inst : GC-V1
Misc : 10 E RSK-175 25uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 13:40 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)
0.74min 57.151ug/L
response 34592944

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG37.D Vial: 37
 Acq On : 4 Aug 2017 1:48 pm Operator: JH2
 Sample : 1720405-17 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:18 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

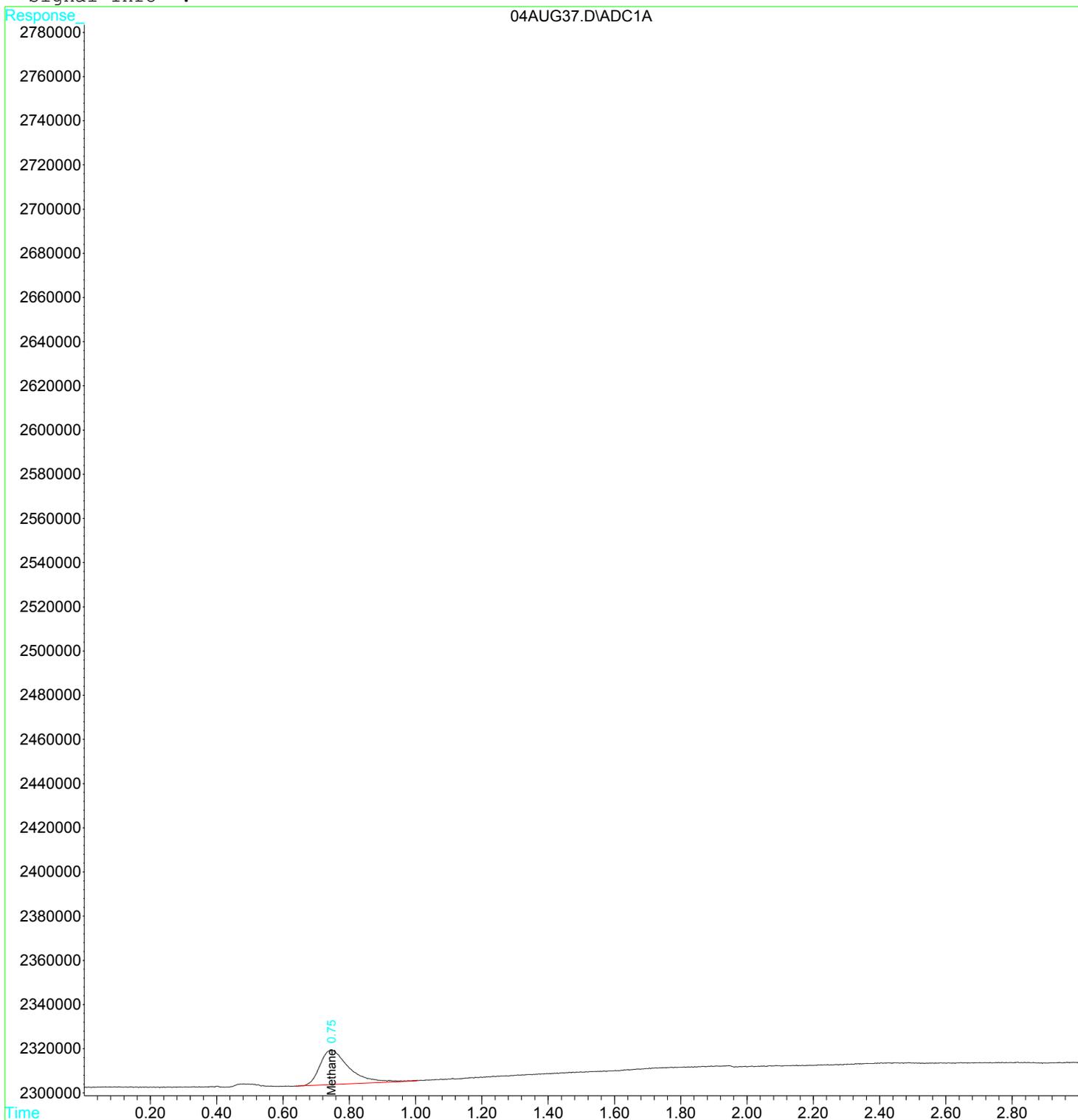
Target Compounds			
1) m Methane	0.75	958259	1.5831 ug/L m
2) m Ethene	0.00	0	N.D. ug/L
3) m Ethane	0.00	0	N.D. ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG37.D Vial: 37
Acq On : 4 Aug 2017 1:48 pm Operator: JH2
Sample : 1720405-17 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:18 2017 Quant Results File: RSK175.RES

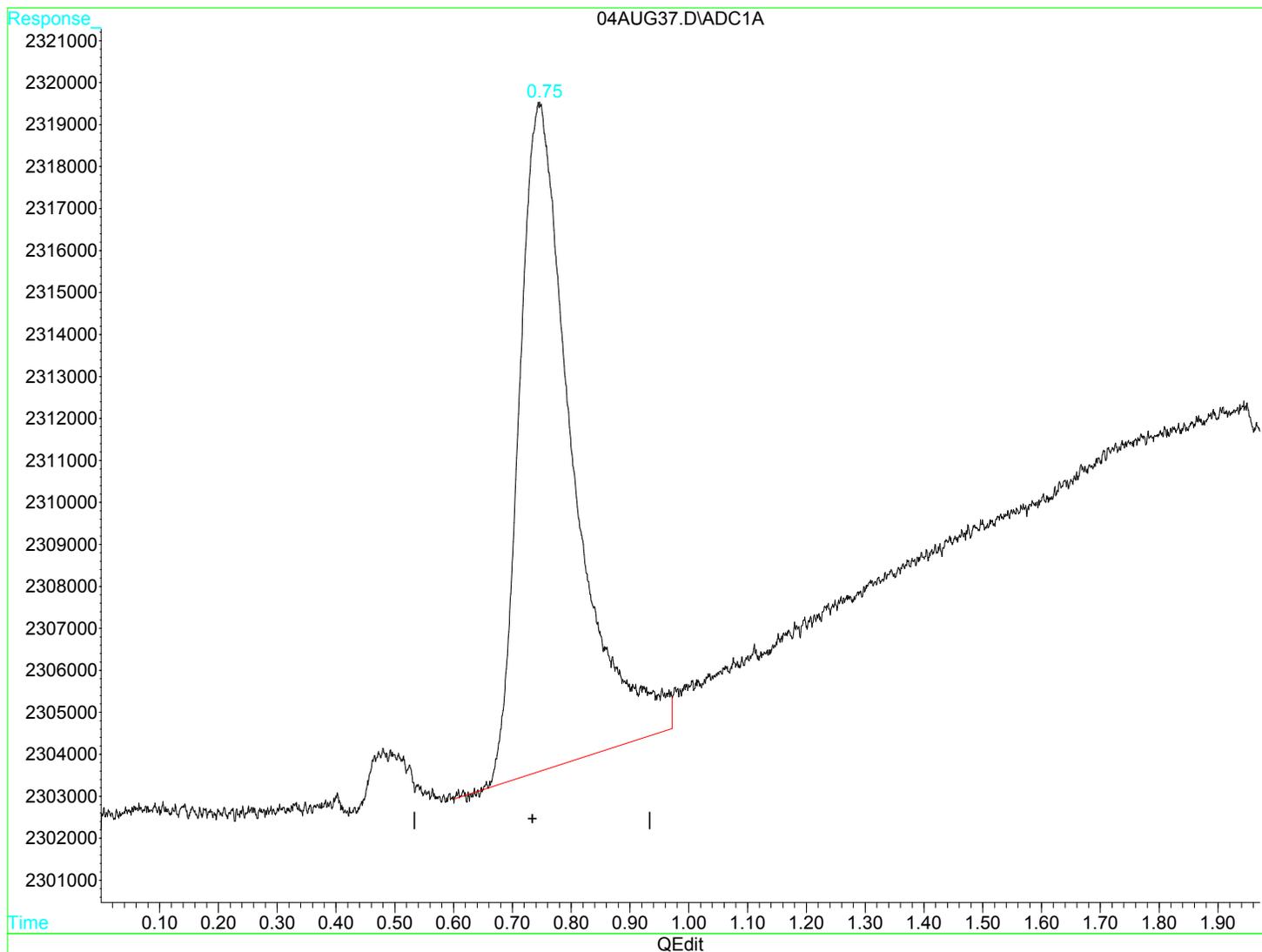
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG37.D Vial: 37
 Acq On : 4 Aug 2017 1:48 pm Operator: JH2
 Sample : 1720405-17 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 13:52 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

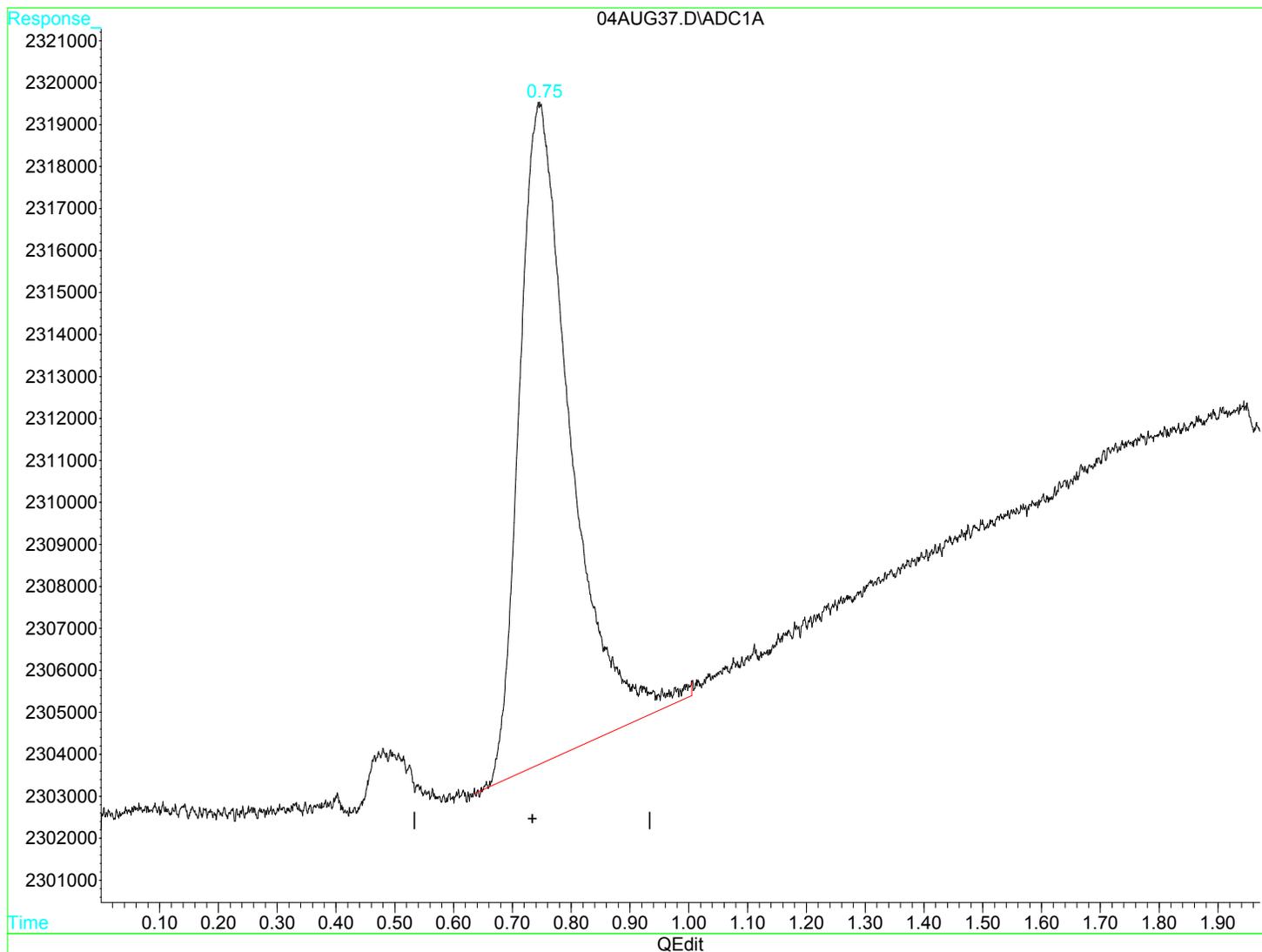


(1) Methane (m)
 0.75min 1.665ug/L
 response 1007784

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG37.D Vial: 37
 Acq On : 4 Aug 2017 1:48 pm Operator: JH2
 Sample : 1720405-17 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 13:52 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)
 0.75min 1.583ug/L m
 response 958259

(+) = Expected Retention Time



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Raw Data - Calibration Standards

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
 Acq On : 27 Jan 2017 7:56 am Operator: JH2
 Sample : 1701454-CAL1 Inst : GC-V1
 Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Tue Jan 06 14:13:40 2015
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

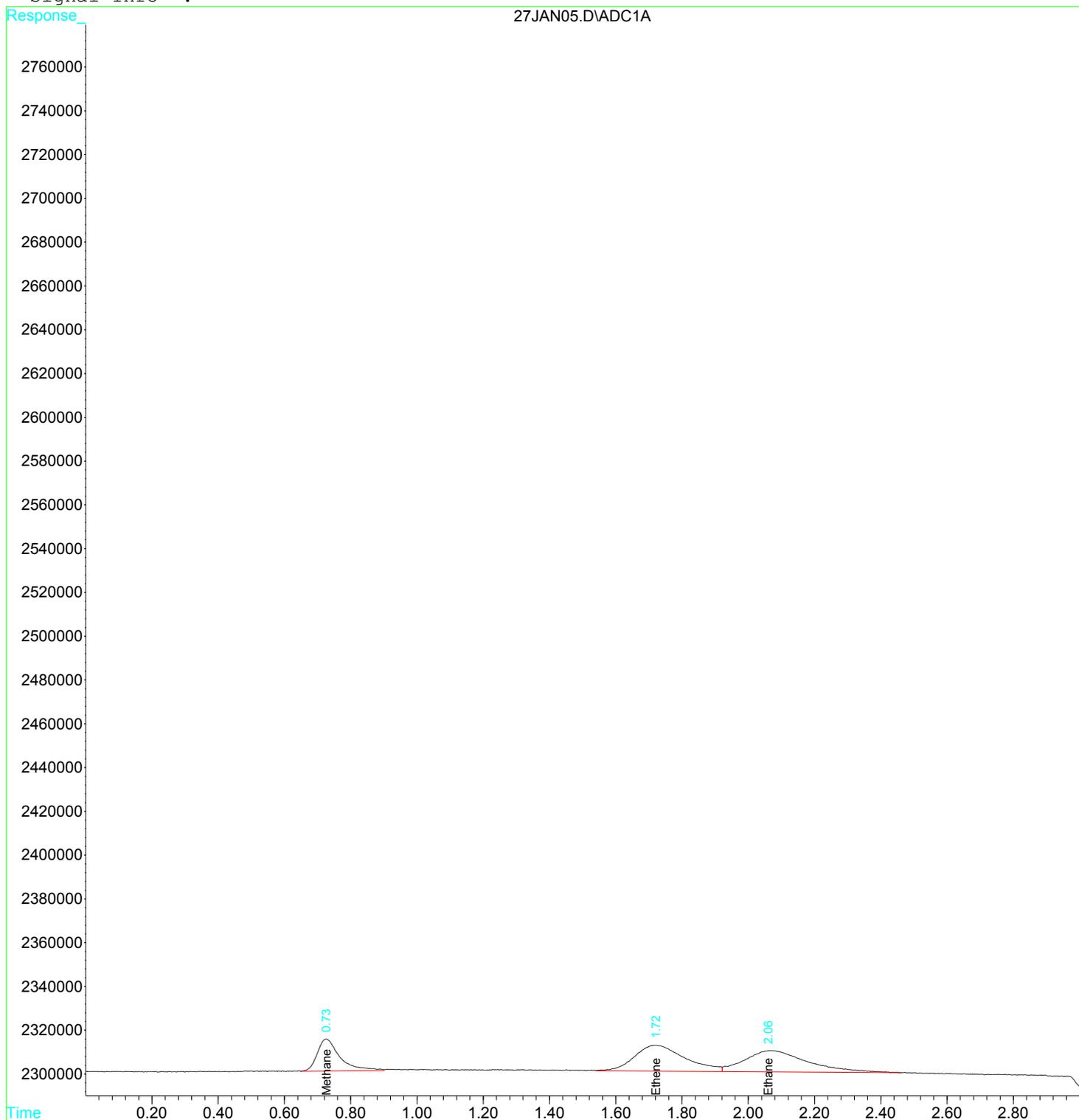
Compound	R.T.	Response	Conc Units

Target Compounds			
1) m Methane	0.73	691757	1.1814 ug/L
2) m Ethene	1.72	1251437	3.2424 ug/L
3) m Ethane	2.07	1275089	2.2179 ug/L

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

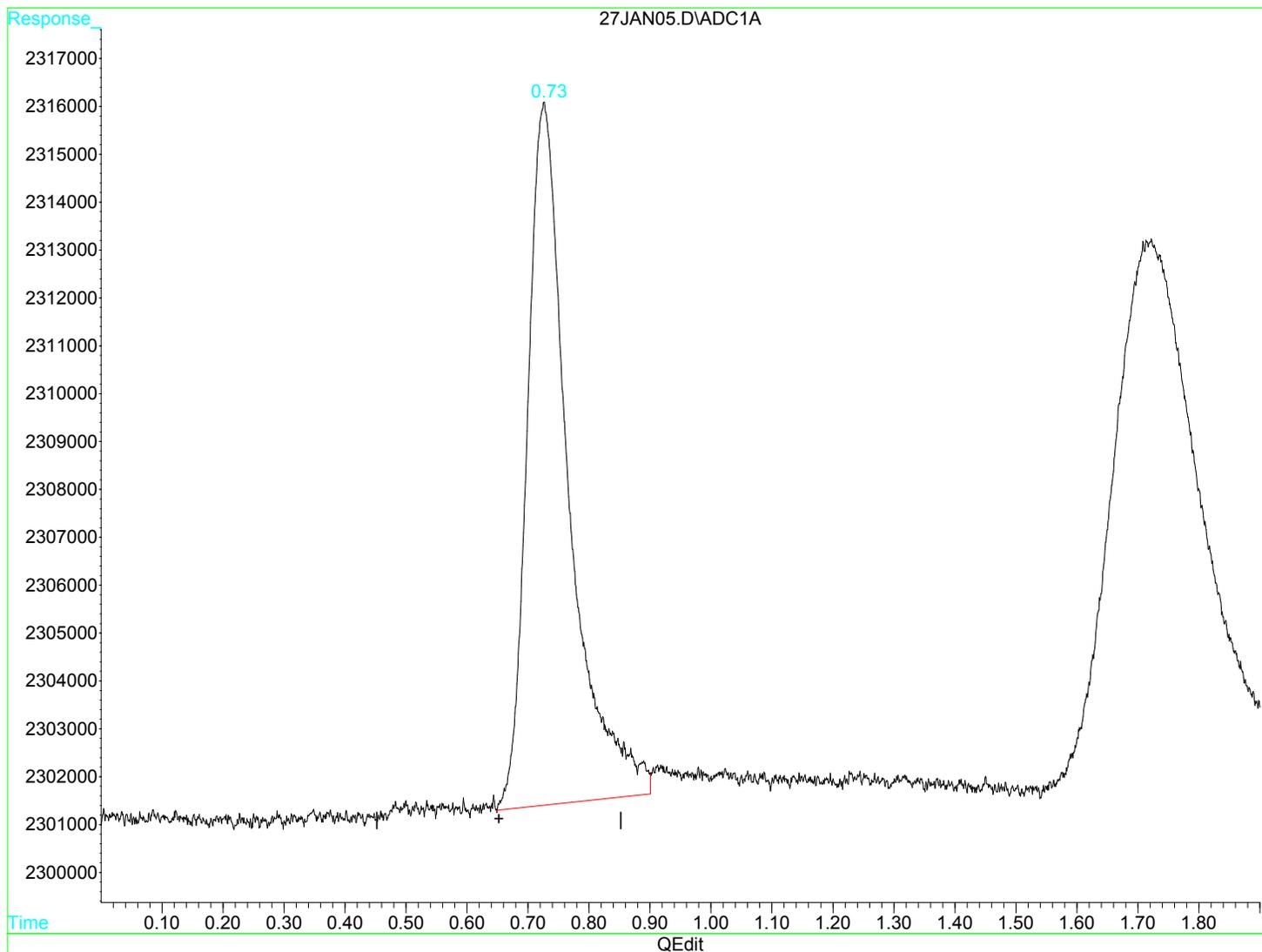
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

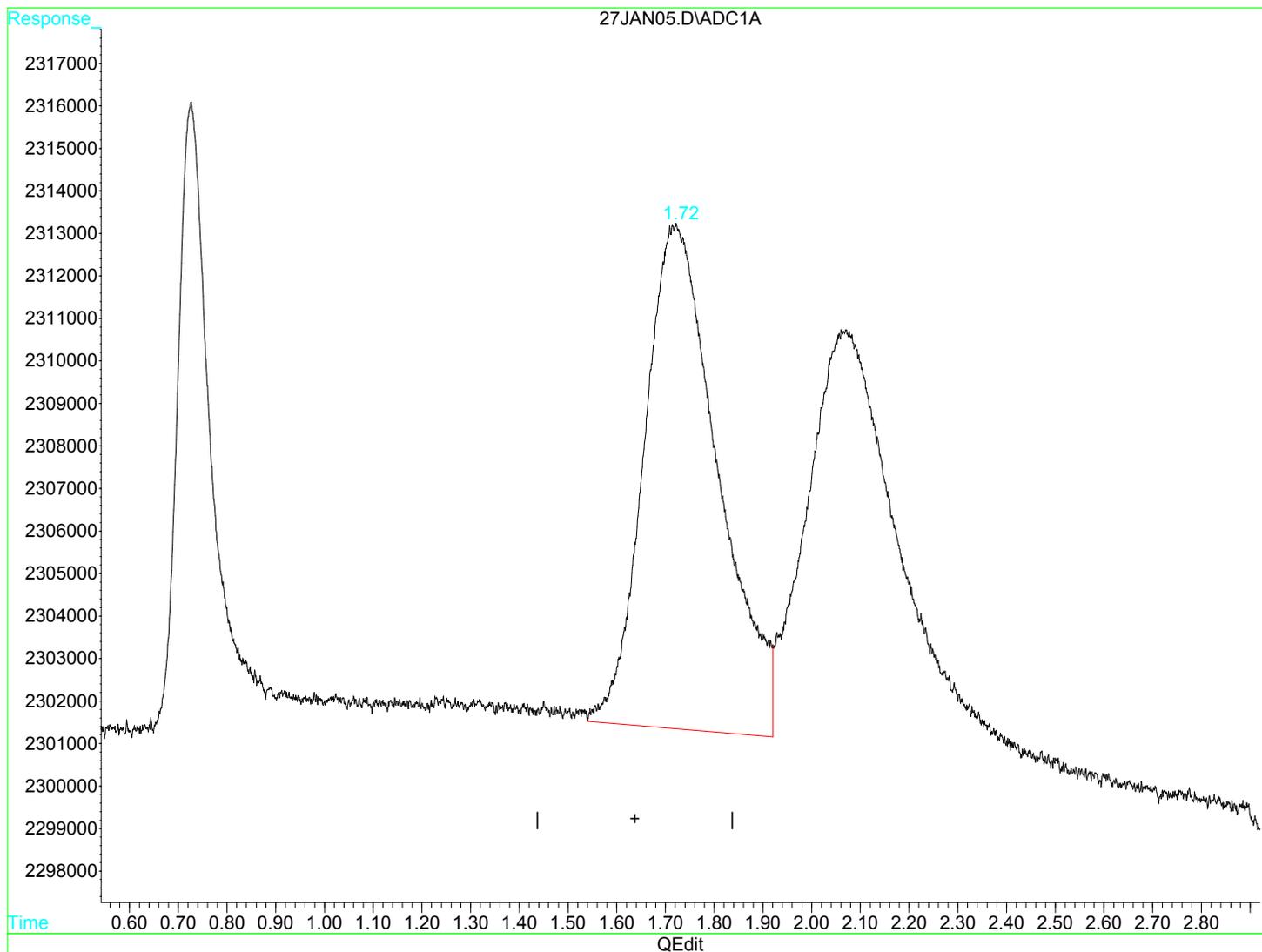
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)
0.73min 1.181ug/L
response 691757

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
 Acq On : 27 Jan 2017 7:56 am Operator: JH2
 Sample : 1701454-CAL1 Inst : GC-V1
 Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

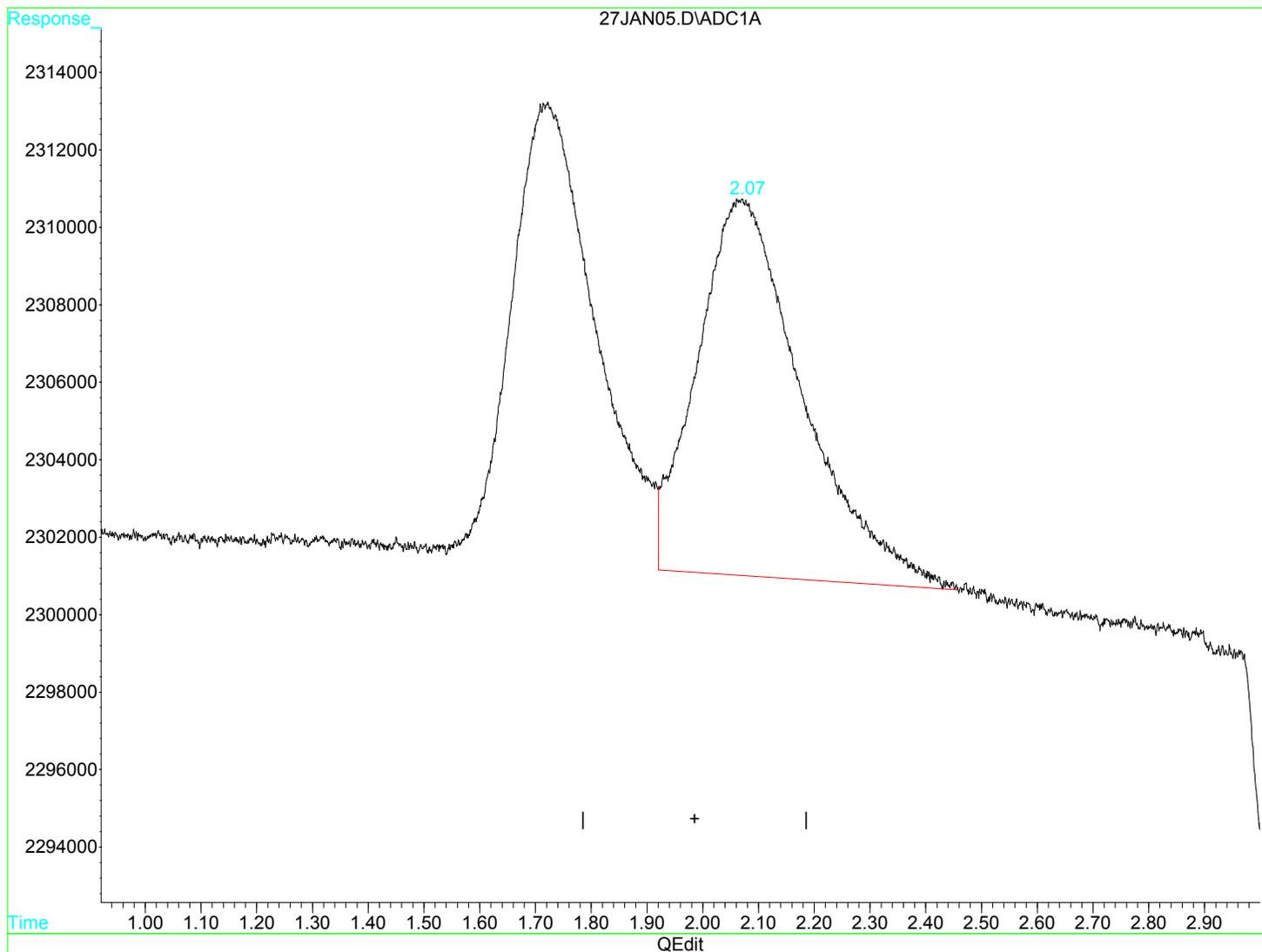
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)
 1.72min 3.242ug/L
 response 1251437

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

2.07min 2.218ug/L

response 1275089

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
 Acq On : 27 Jan 2017 7:52 am Operator: JH2
 Sample : 1701454-CAL2 Inst : GC-V1
 Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Tue Jan 06 14:13:40 2015
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

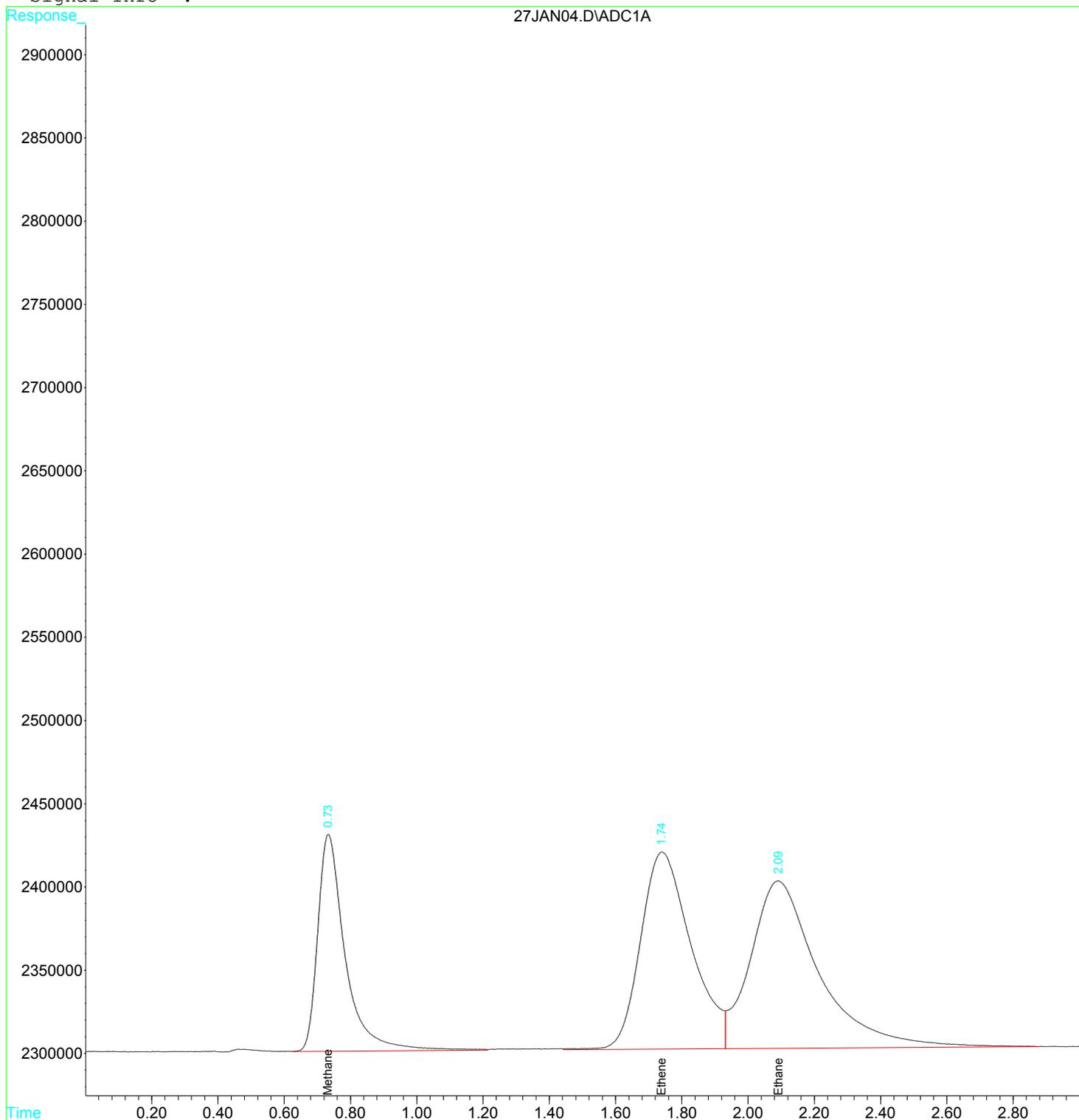
Target Compounds			
1) m Methane	0.73	7510447	12.8269 ug/L
2) m Ethene	1.74f	12518403	32.4341 ug/L
3) m Ethane	2.09f	14383928	25.0192 ug/L

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
Acq On : 27 Jan 2017 7:52 am Operator: JH2
Sample : 1701454-CAL2 Inst : GC-V1
Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

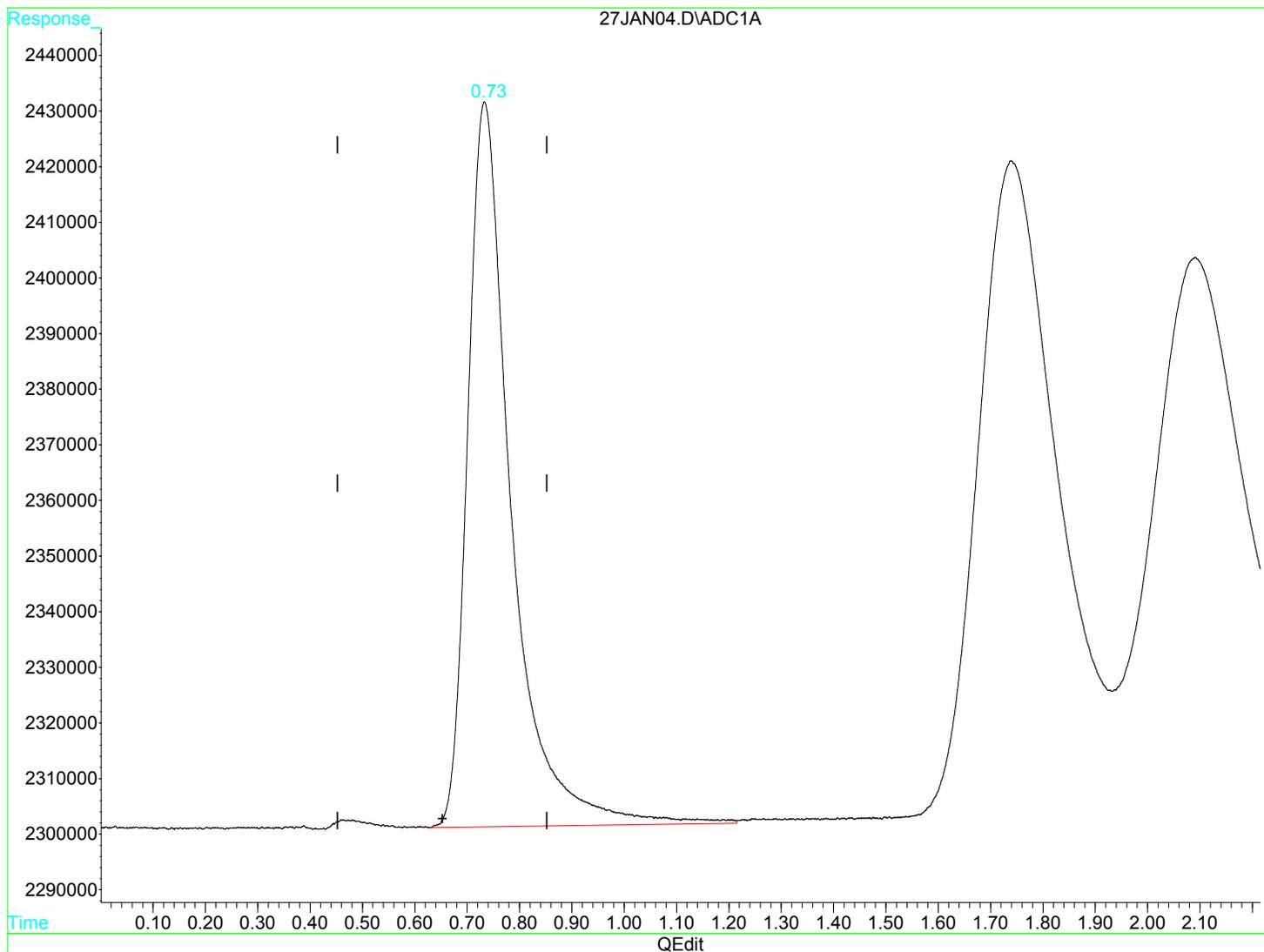
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
Acq On : 27 Jan 2017 7:52 am Operator: JH2
Sample : 1701454-CAL2 Inst : GC-V1
Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

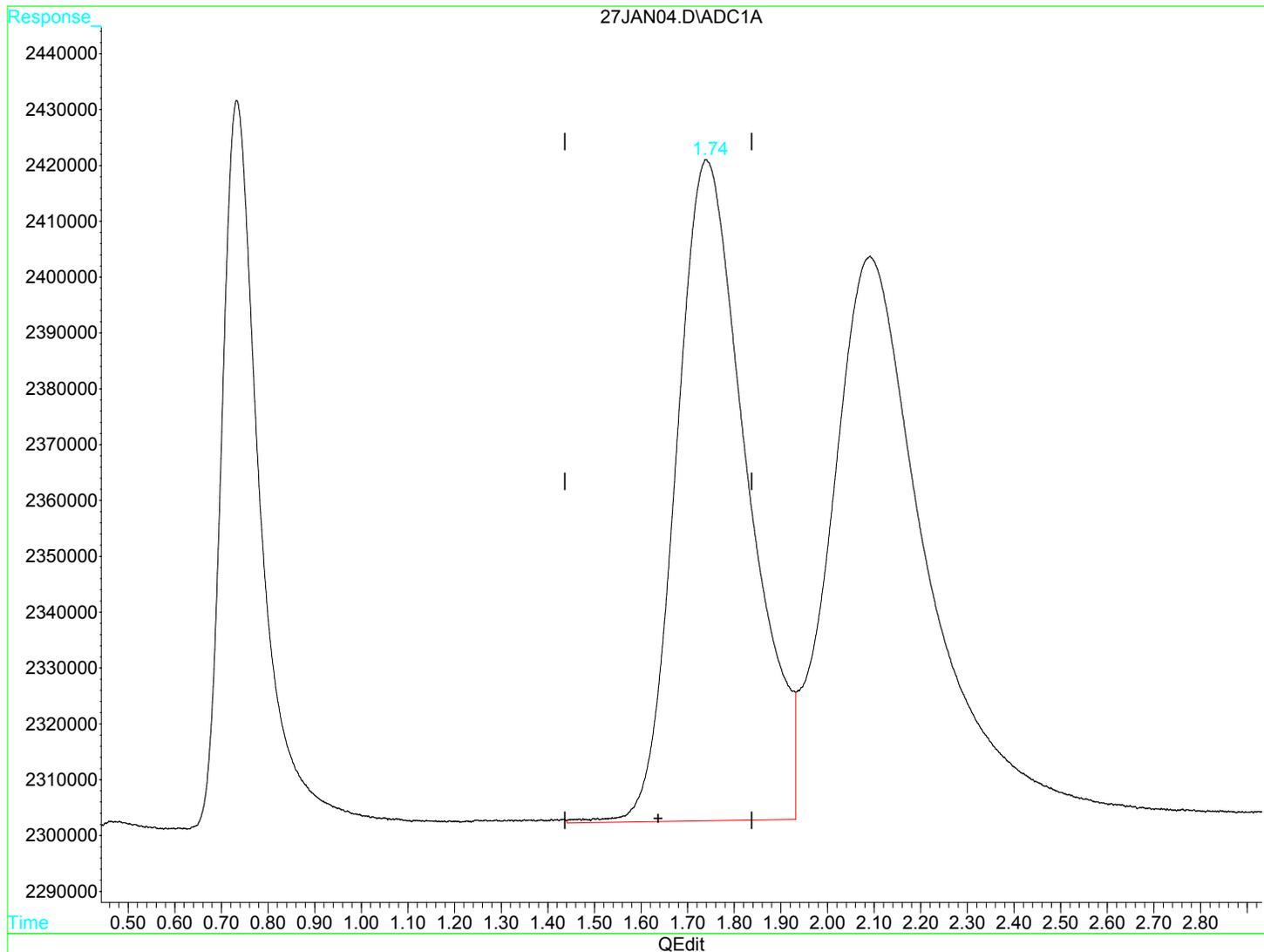
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)
0.73min 12.827ug/L
response 7510447

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
 Acq On : 27 Jan 2017 7:52 am Operator: JH2
 Sample : 1701454-CAL2 Inst : GC-V1
 Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

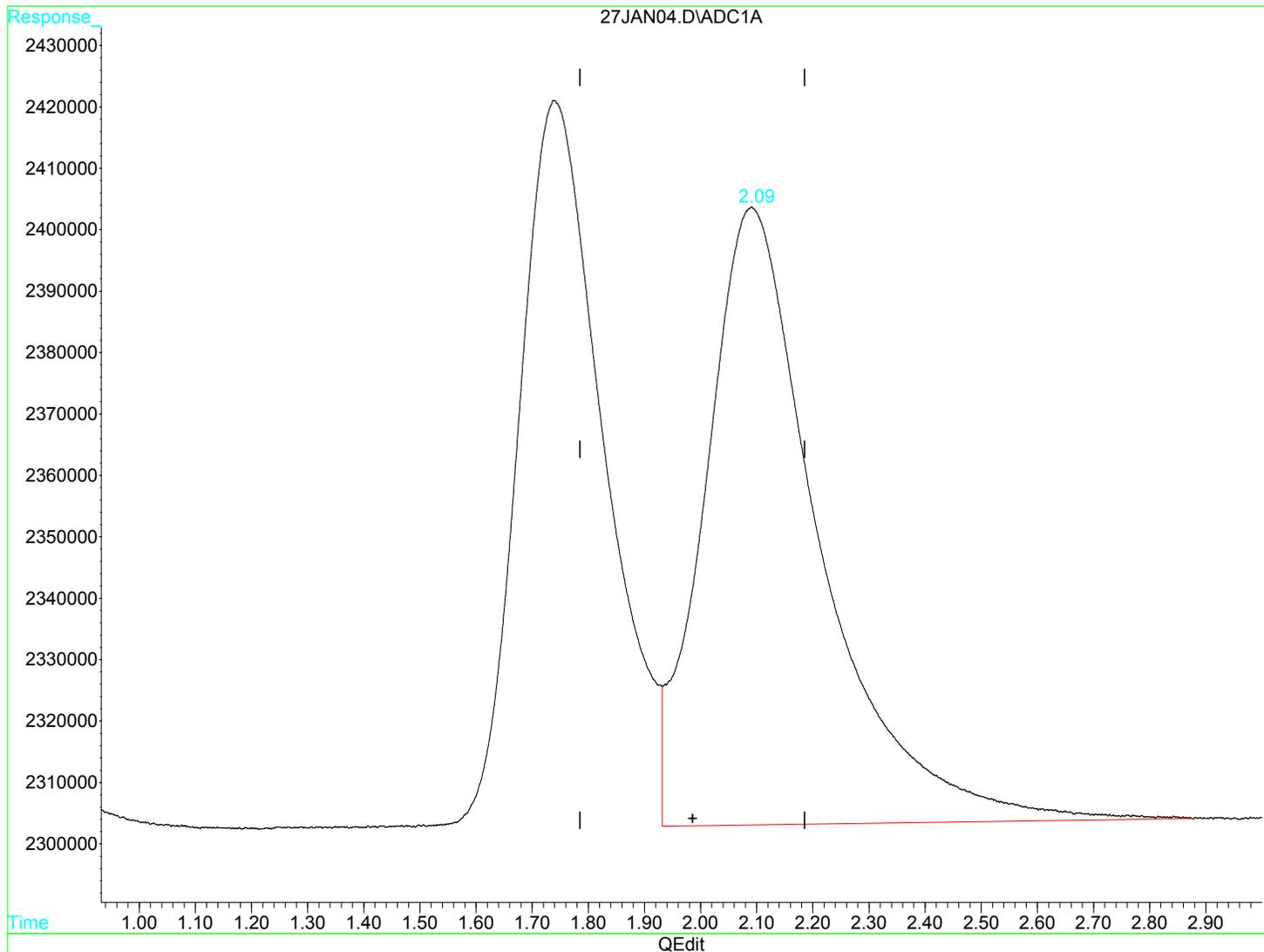


(2) Ethene (m)
 1.74min 32.434ug/L
 response 12518403

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
 Acq On : 27 Jan 2017 7:52 am Operator: JH2
 Sample : 1701454-CAL2 Inst : GC-V1
 Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 2.09min 25.019ug/L
 response 14383928

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
 Acq On : 27 Jan 2017 7:47 am Operator: JH2
 Sample : 1701454-CAL3 Inst : GC-V1
 Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Tue Jan 06 14:13:40 2015
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

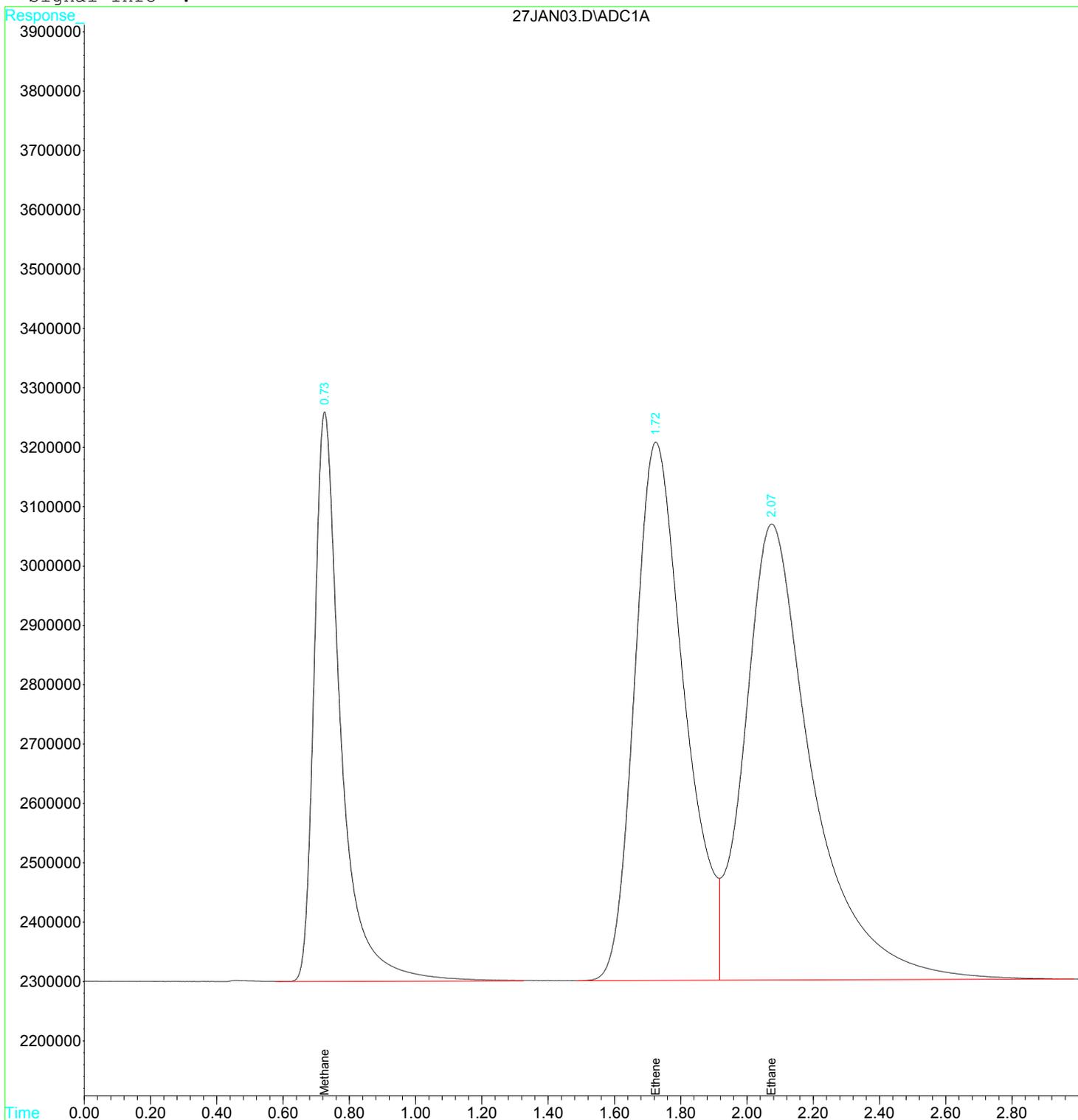
Compound	R.T.	Response	Conc Units

Target Compounds			
1) m Methane	0.73	53526843	91.4168 ug/L
2) m Ethene	1.73	94904572	245.8892 ug/L
3) m Ethane	2.08	108935077	189.4801 ug/L

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
Acq On : 27 Jan 2017 7:47 am Operator: JH2
Sample : 1701454-CAL3 Inst : GC-V1
Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

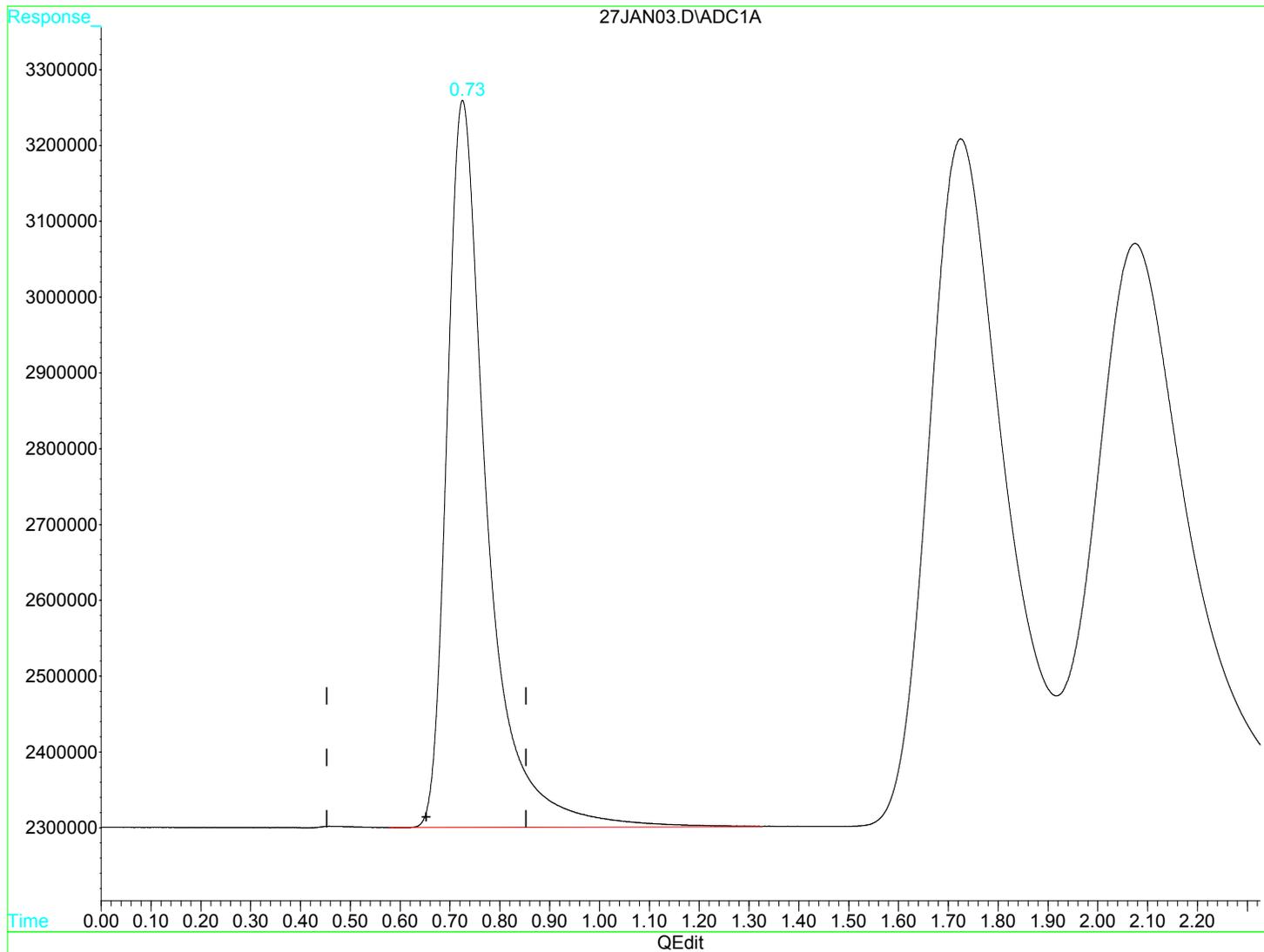
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
 Acq On : 27 Jan 2017 7:47 am Operator: JH2
 Sample : 1701454-CAL3 Inst : GC-V1
 Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

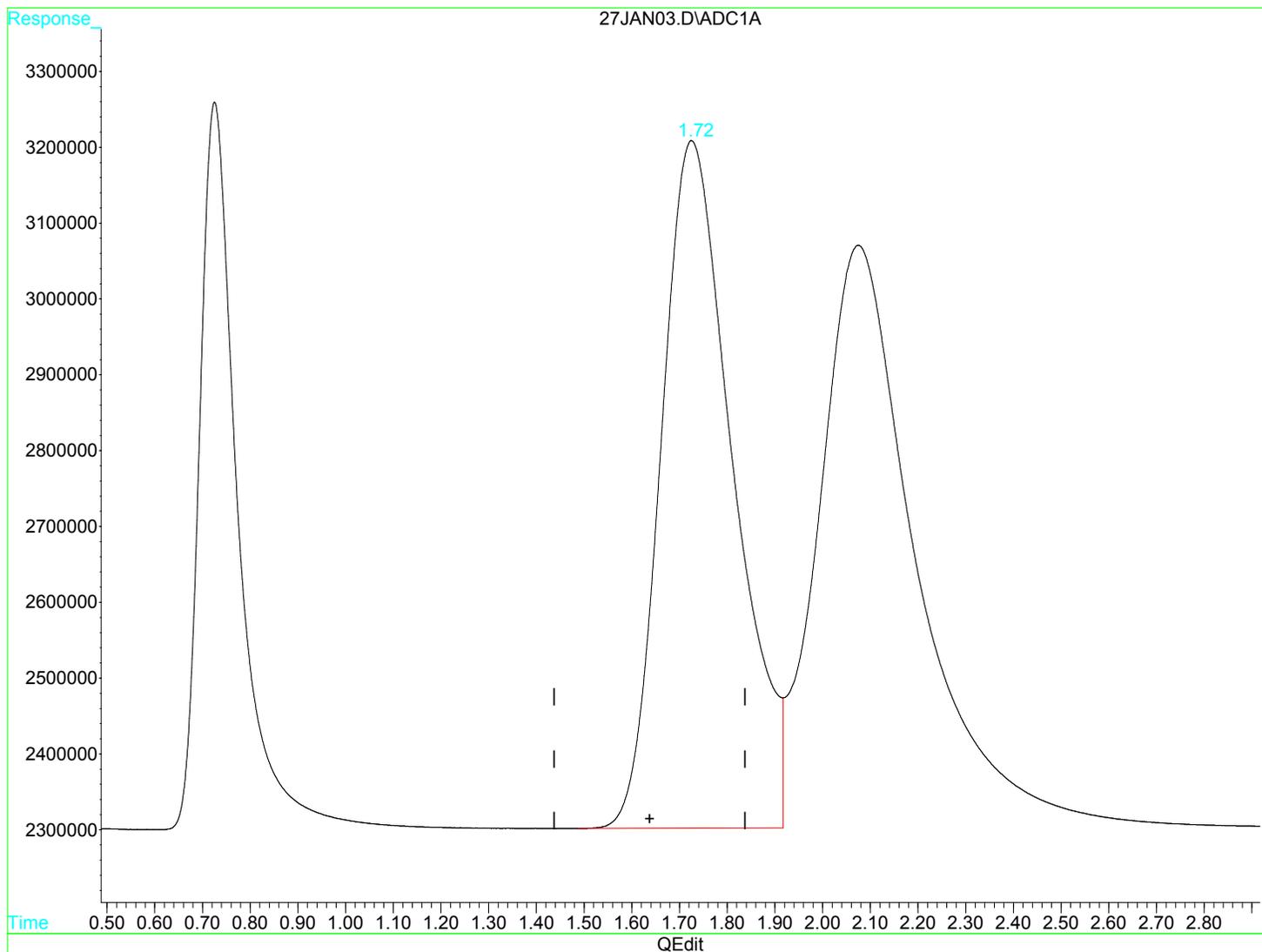
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)
 0.73min 91.417ug/L
 response 53526843

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
 Acq On : 27 Jan 2017 7:47 am Operator: JH2
 Sample : 1701454-CAL3 Inst : GC-V1
 Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

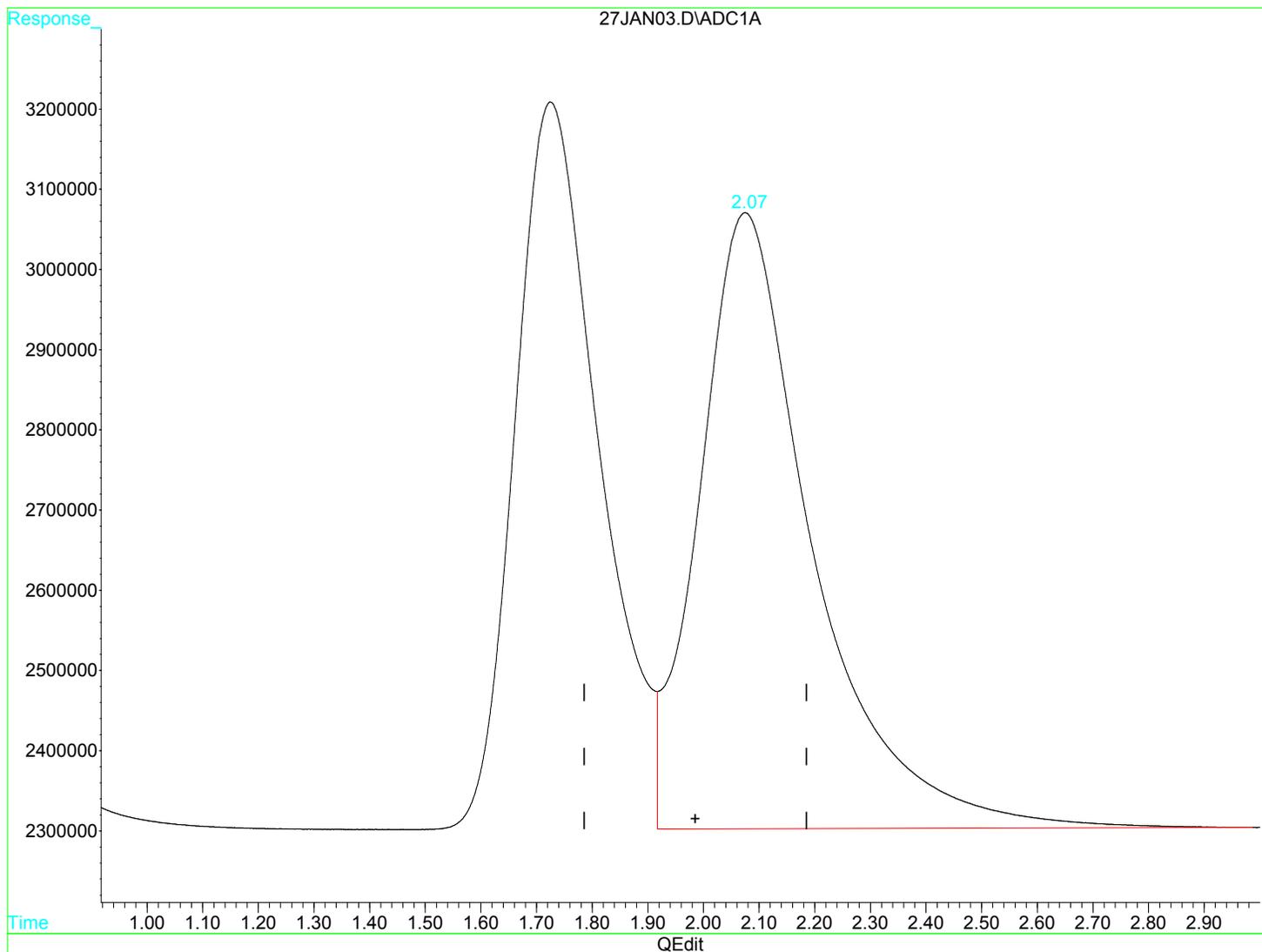


(2) Ethene (m)
 1.73min 245.889ug/L
 response 94904572

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
 Acq On : 27 Jan 2017 7:47 am Operator: JH2
 Sample : 1701454-CAL3 Inst : GC-V1
 Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 2.08min 189.480ug/L
 response 108935077

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
 Acq On : 27 Jan 2017 7:43 am Operator: JH2
 Sample : 1701454-CAL4 Inst : GC-V1
 Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Tue Jan 06 14:13:40 2015
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

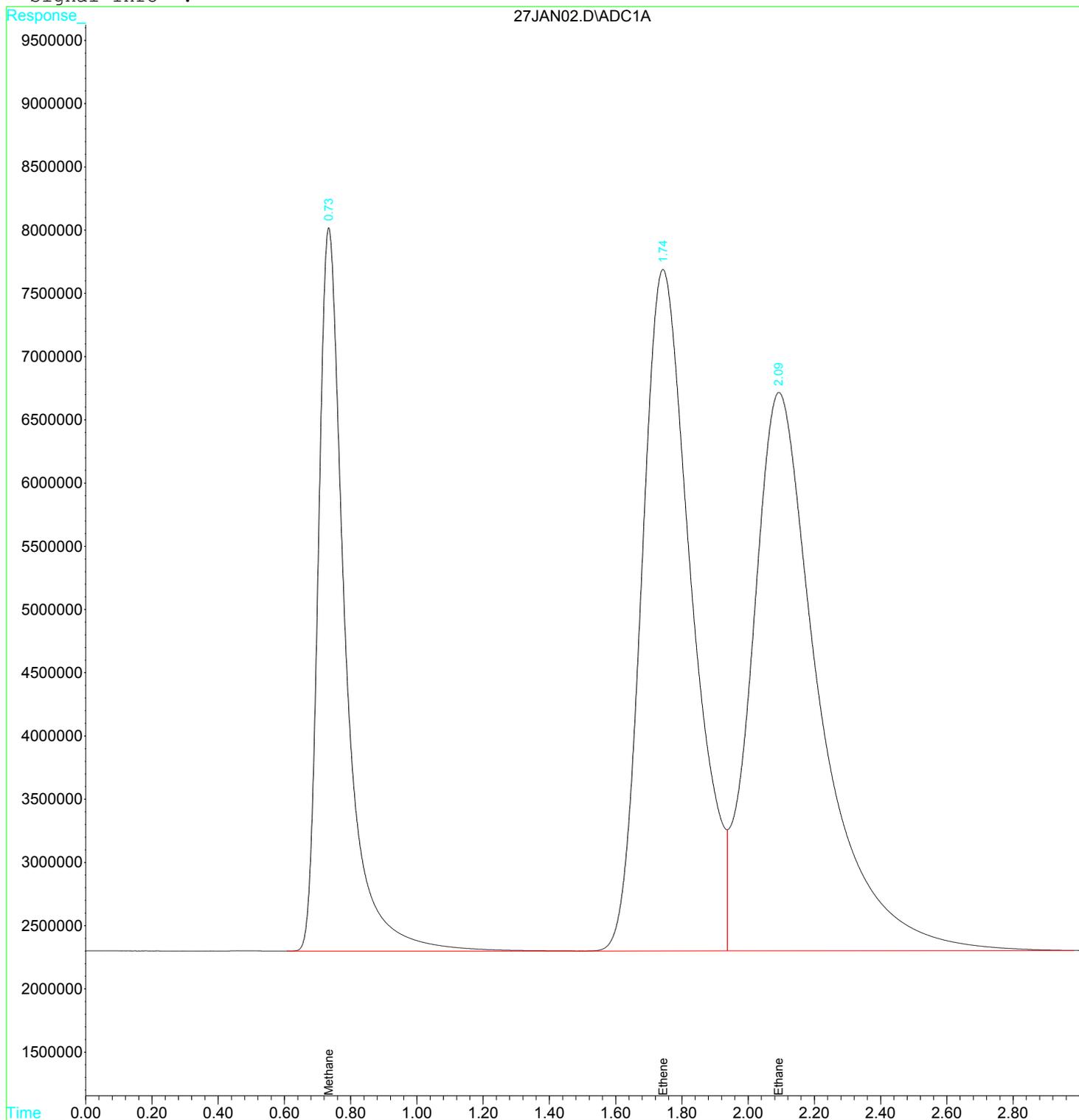
Target Compounds			
1) m Methane	0.73	323602300	552.6703 ug/L
2) m Ethene	1.74f	563612878	1460.2703 ug/L
3) m Ethane	2.09f	624041169	1085.4482 ug/L

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
Acq On : 27 Jan 2017 7:43 am Operator: JH2
Sample : 1701454-CAL4 Inst : GC-V1
Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

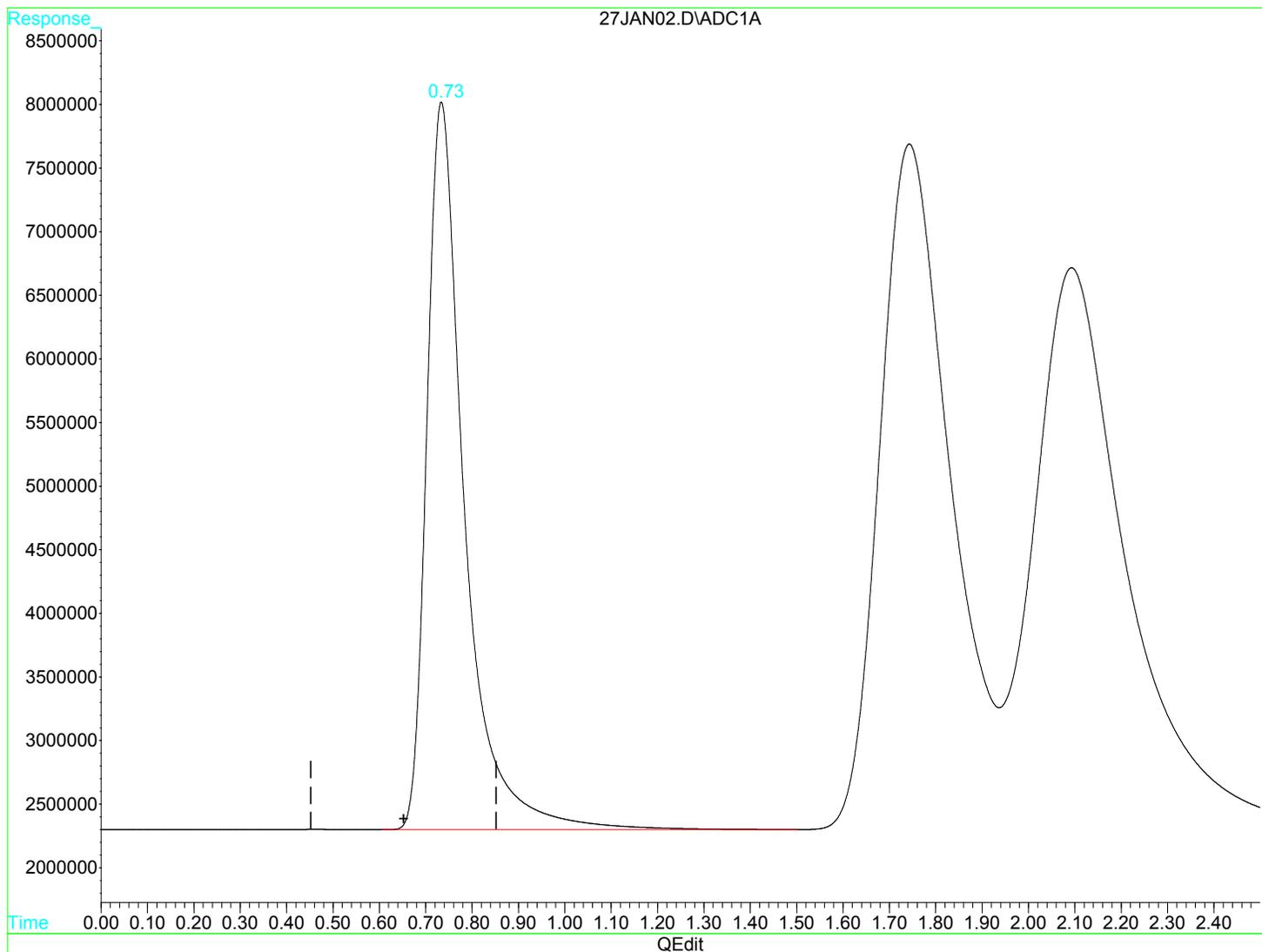
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
 Acq On : 27 Jan 2017 7:43 am Operator: JH2
 Sample : 1701454-CAL4 Inst : GC-V1
 Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

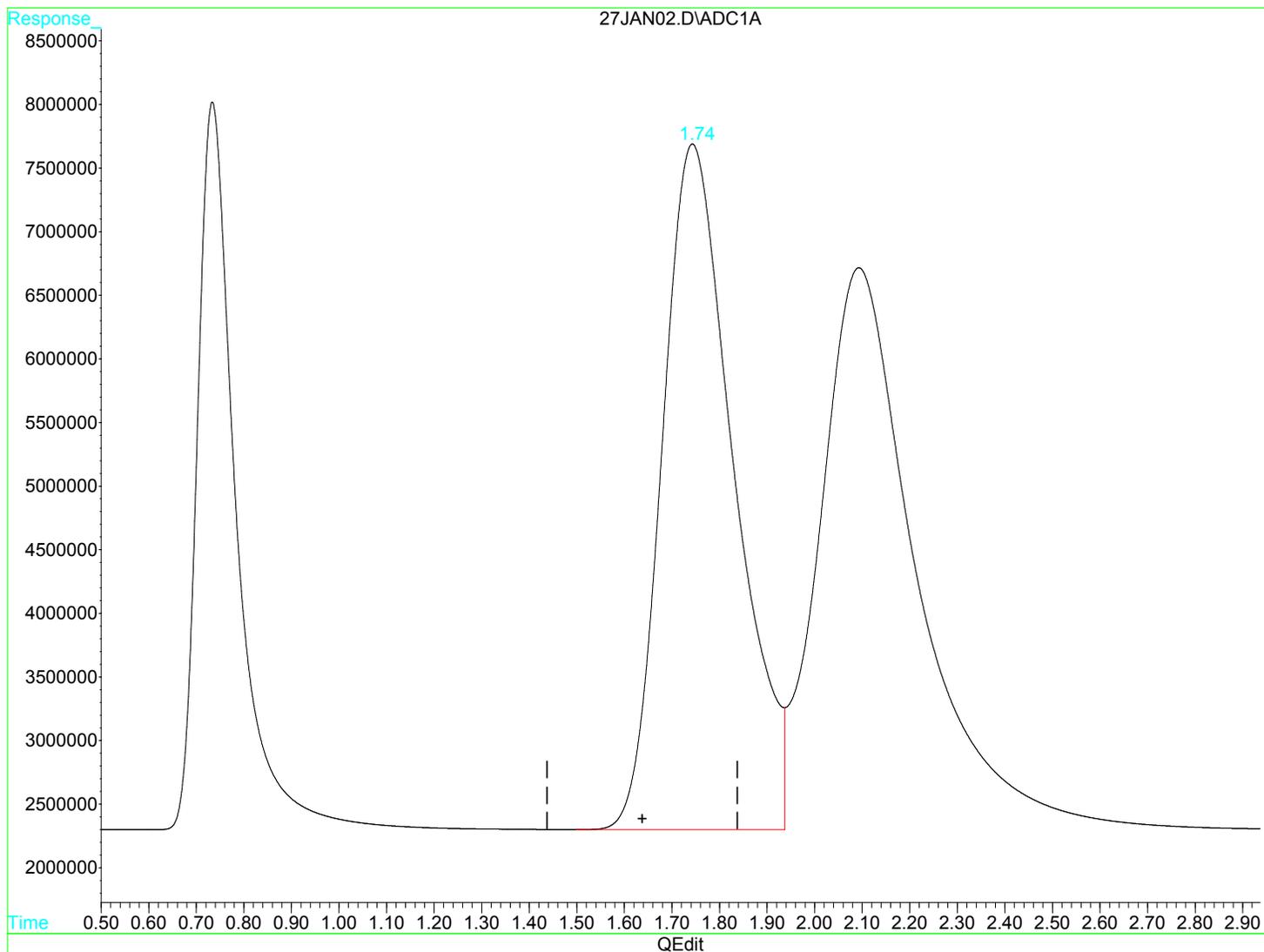
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)
 0.73min 552.670ug/L
 response 323602300

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
 Acq On : 27 Jan 2017 7:43 am Operator: JH2
 Sample : 1701454-CAL4 Inst : GC-V1
 Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

1.74min 1460.270ug/L

response 563612878

(+) = Expected Retention Time



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Raw Data - ICV

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
 Acq On : 27 Jan 2017 8:40 am Operator: JH2
 Sample : 1701454-ICV1 Inst : GC-V1
 Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

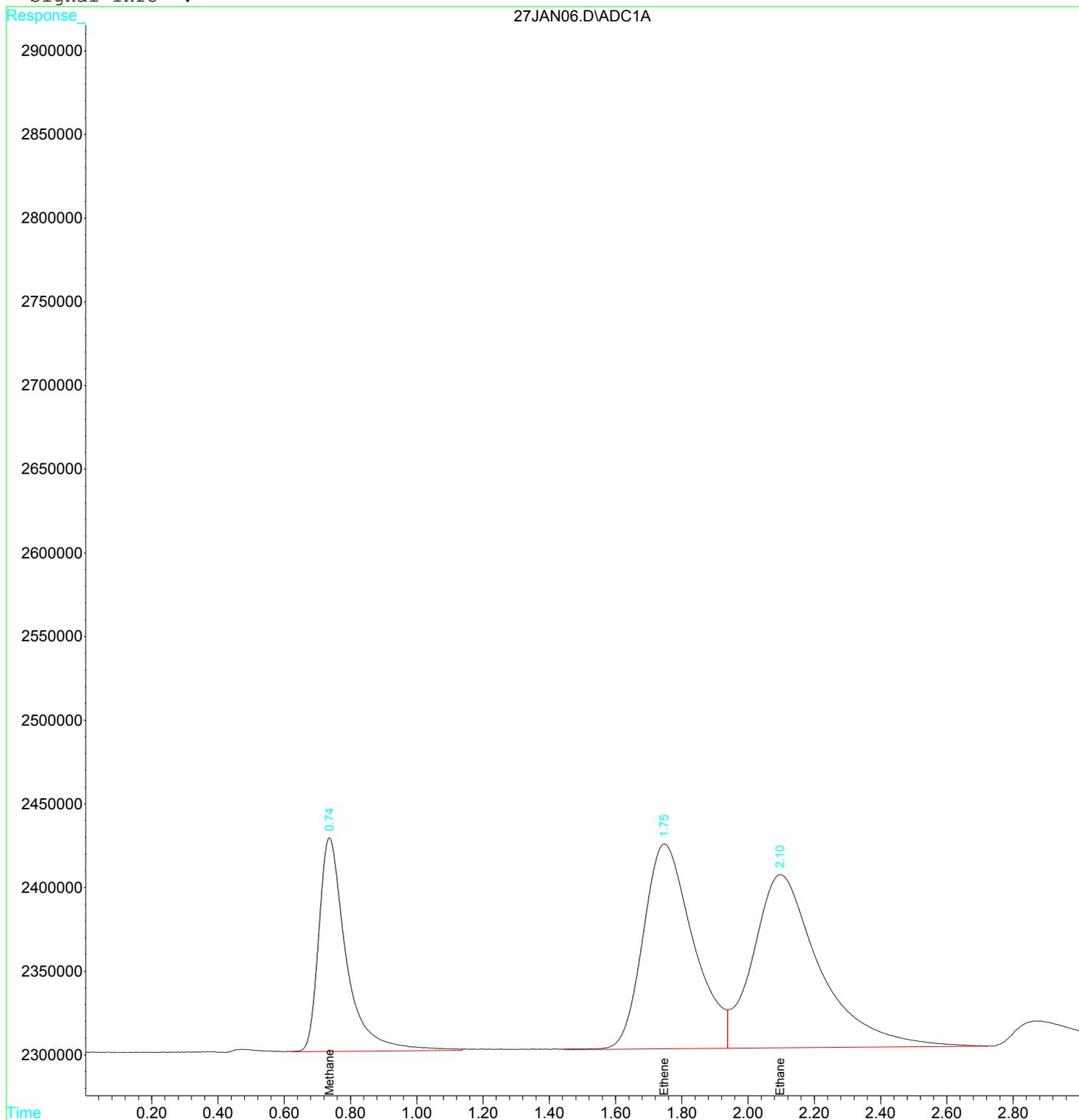
Target Compounds			
1) m Methane	0.74	7368524	12.1735 ug/L
2) m Ethene	1.75	12806794	31.8199 ug/L
3) m Ethane	2.10	14497414	24.9563 ug/L

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
Acq On : 27 Jan 2017 8:40 am Operator: JH2
Sample : 1701454-ICV1 Inst : GC-V1
Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

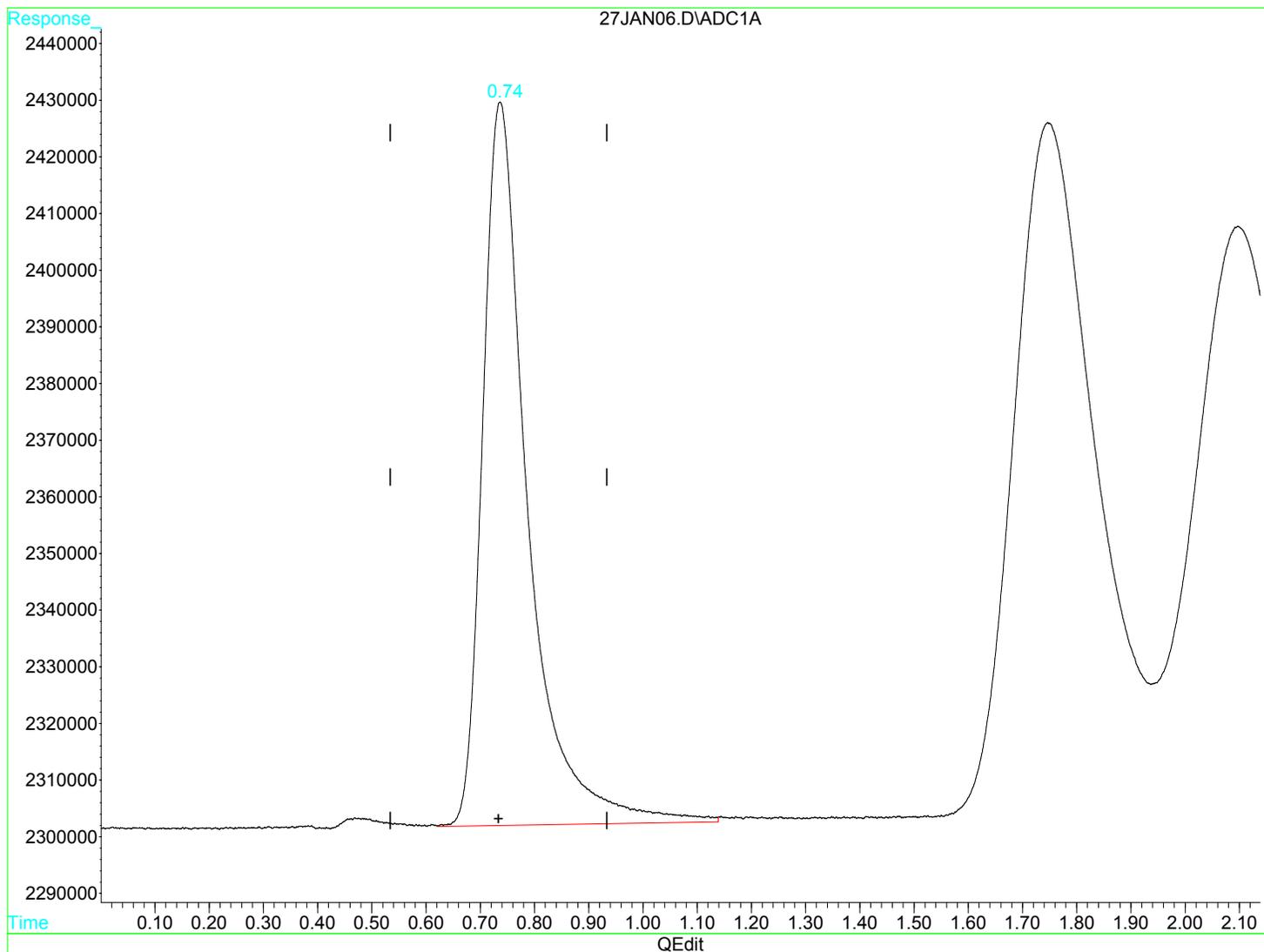
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
 Acq On : 27 Jan 2017 8:40 am Operator: JH2
 Sample : 1701454-ICV1 Inst : GC-V1
 Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

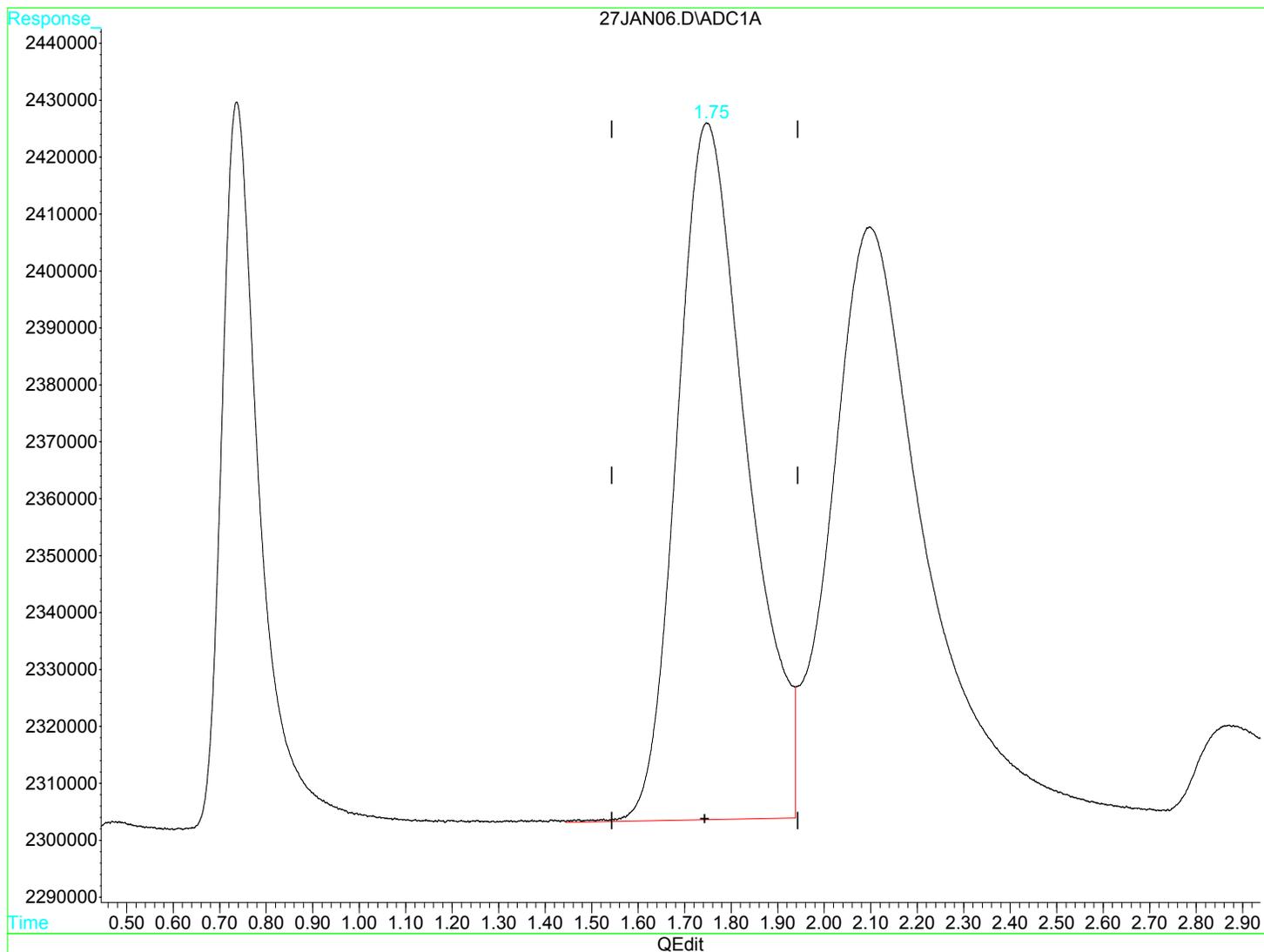


(1) Methane (m)
 0.74min 12.173ug/L
 response 7368524

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
 Acq On : 27 Jan 2017 8:40 am Operator: JH2
 Sample : 1701454-ICV1 Inst : GC-V1
 Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

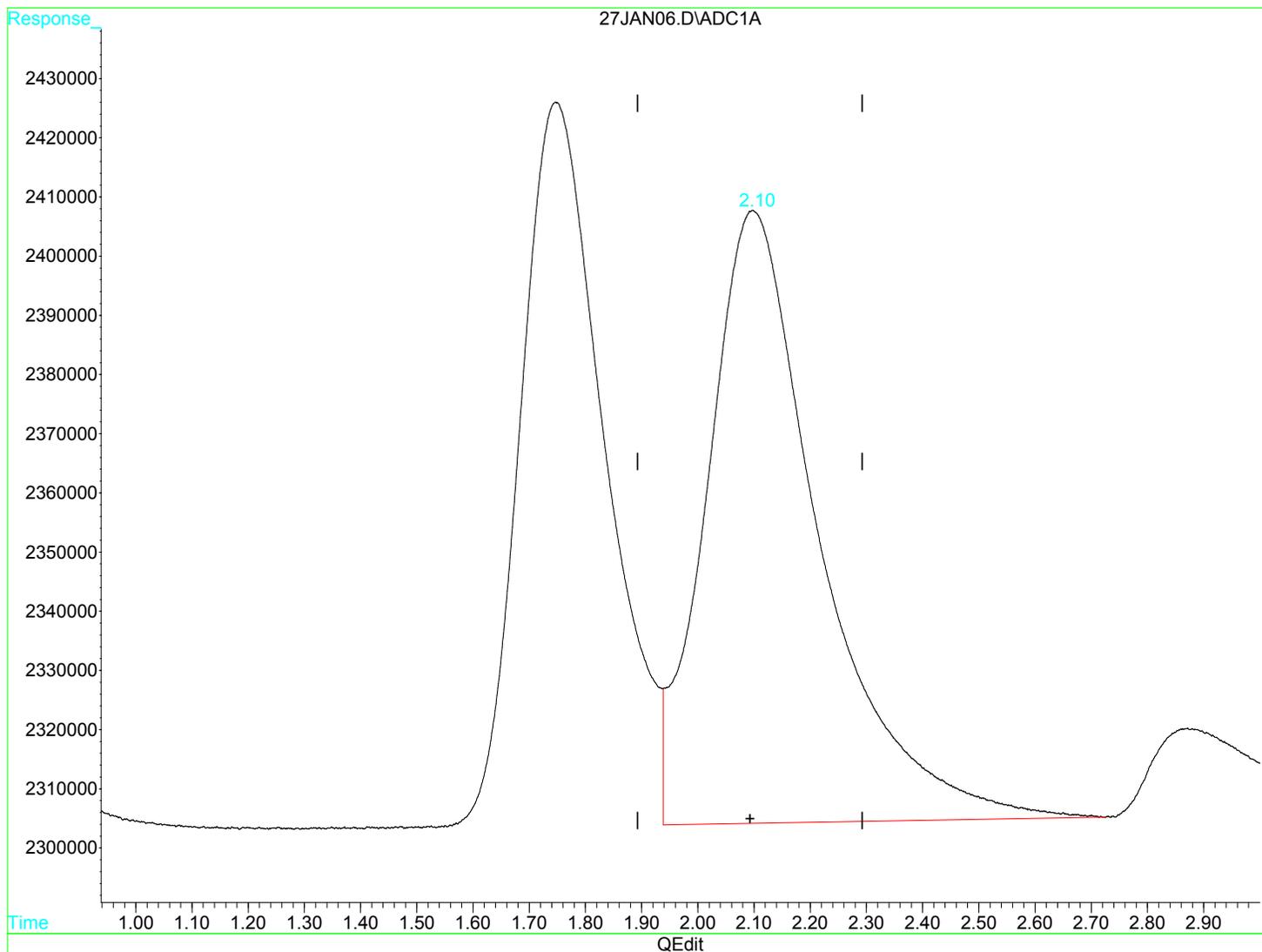


(2) Ethene (m)
 1.75min 31.820ug/L
 response 12806794

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
 Acq On : 27 Jan 2017 8:40 am Operator: JH2
 Sample : 1701454-ICV1 Inst : GC-V1
 Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 2.10min 24.956ug/L
 response 14497414

(+) = Expected Retention Time



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Raw Data - ICB

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN07.D Vial: 7
 Acq On : 27 Jan 2017 8:45 am Operator: JH2
 Sample : 1701454-ICB1 Inst : GC-V1
 Misc : 1 He 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Feb 7 10:21 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

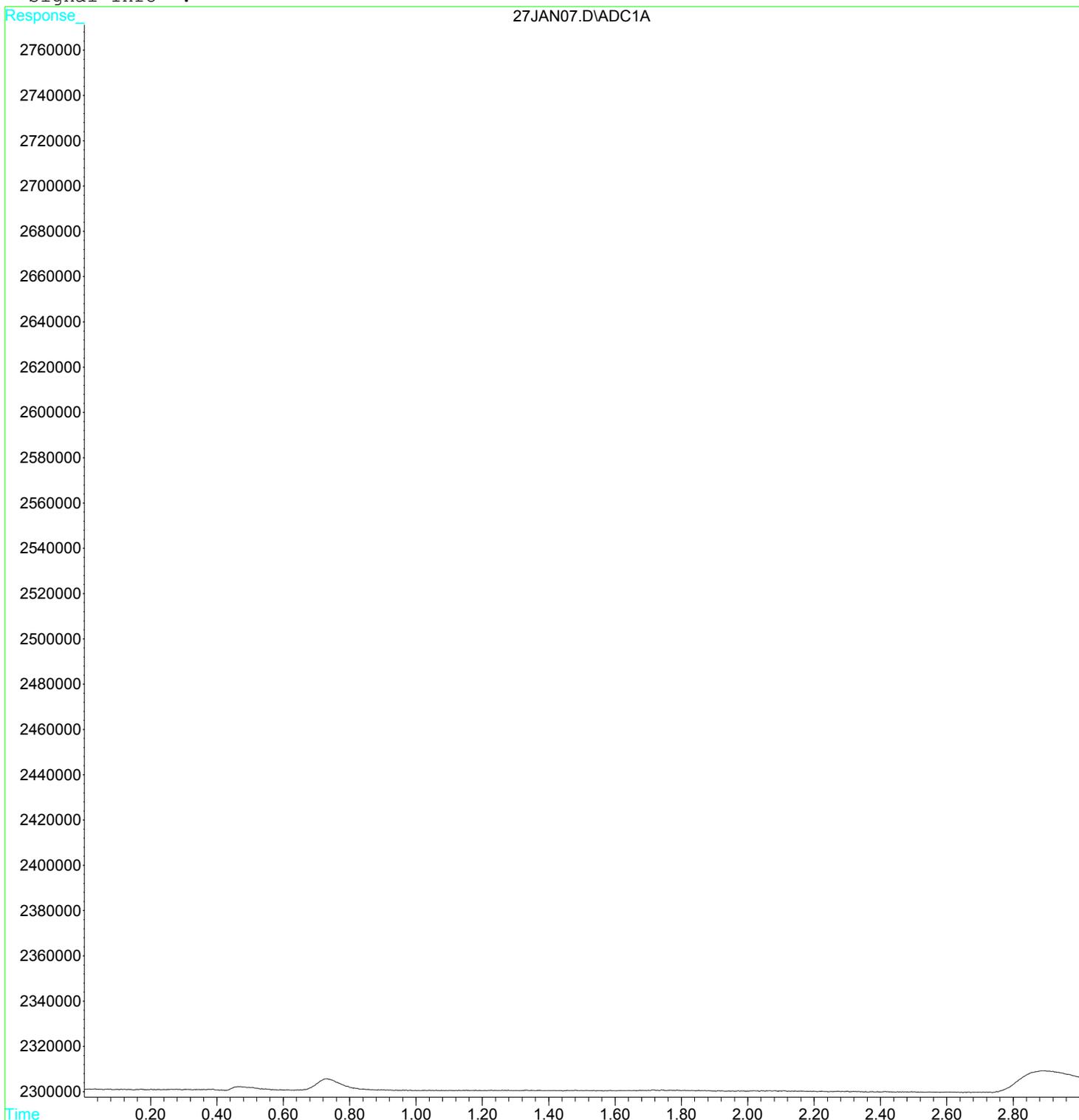
Target Compounds			
1) m Methane	0.00	0	N.D. ug/L d
2) m Ethene	0.00	0	N.D. ug/L
3) m Ethane	0.00	0	N.D. ug/L

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN07.D Vial: 7
Acq On : 27 Jan 2017 8:45 am Operator: JH2
Sample : 1701454-ICB1 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:21 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :





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Raw Data - CCV

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
 Acq On : 4 Aug 2017 6:36 am Operator: JH2
 Sample : 1713774-CCV1 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 8:54 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

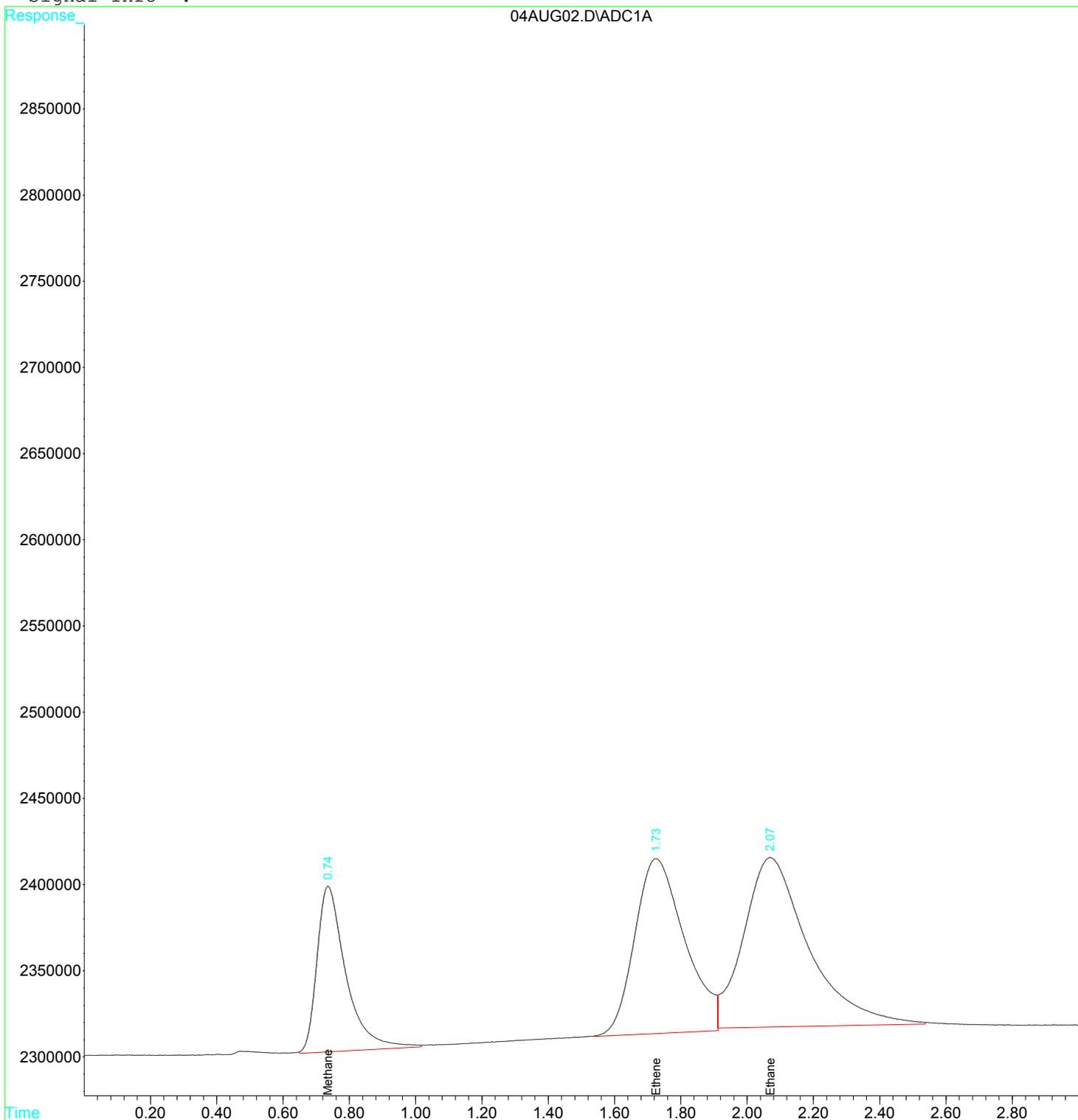
Target Compounds			
1) m Methane	0.74	5829801	9.6314 ug/L m
2) m Ethene	1.73	10645124	26.4490 ug/L m
3) m Ethane	2.07	13361975	23.0017 ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
Acq On : 4 Aug 2017 6:36 am Operator: JH2
Sample : 1713774-CCV1 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:54 2017 Quant Results File: RSK175.RES

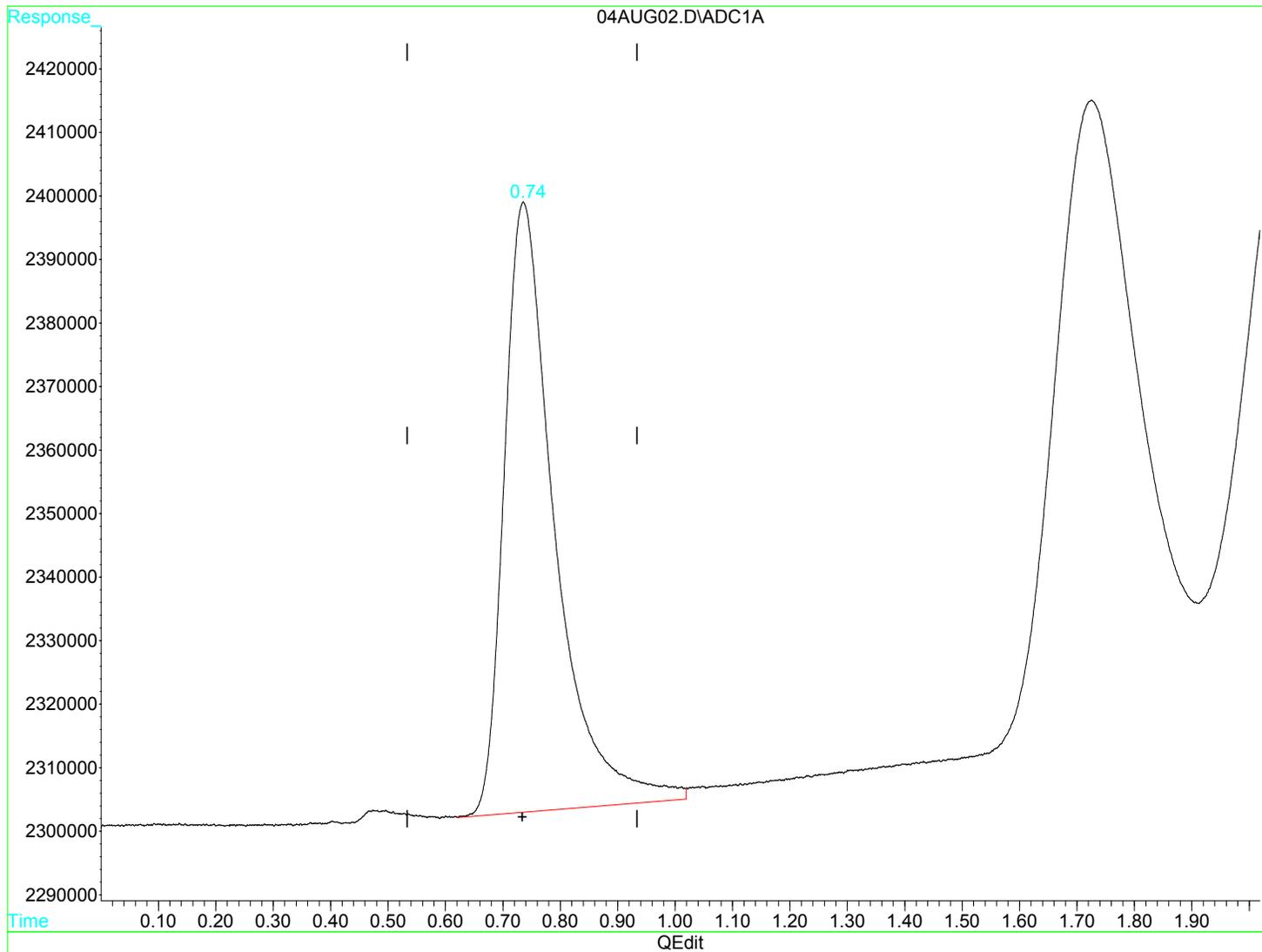
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
 Acq On : 4 Aug 2017 6:36 am Operator: JH2
 Sample : 1713774-CCV1 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 6:52 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

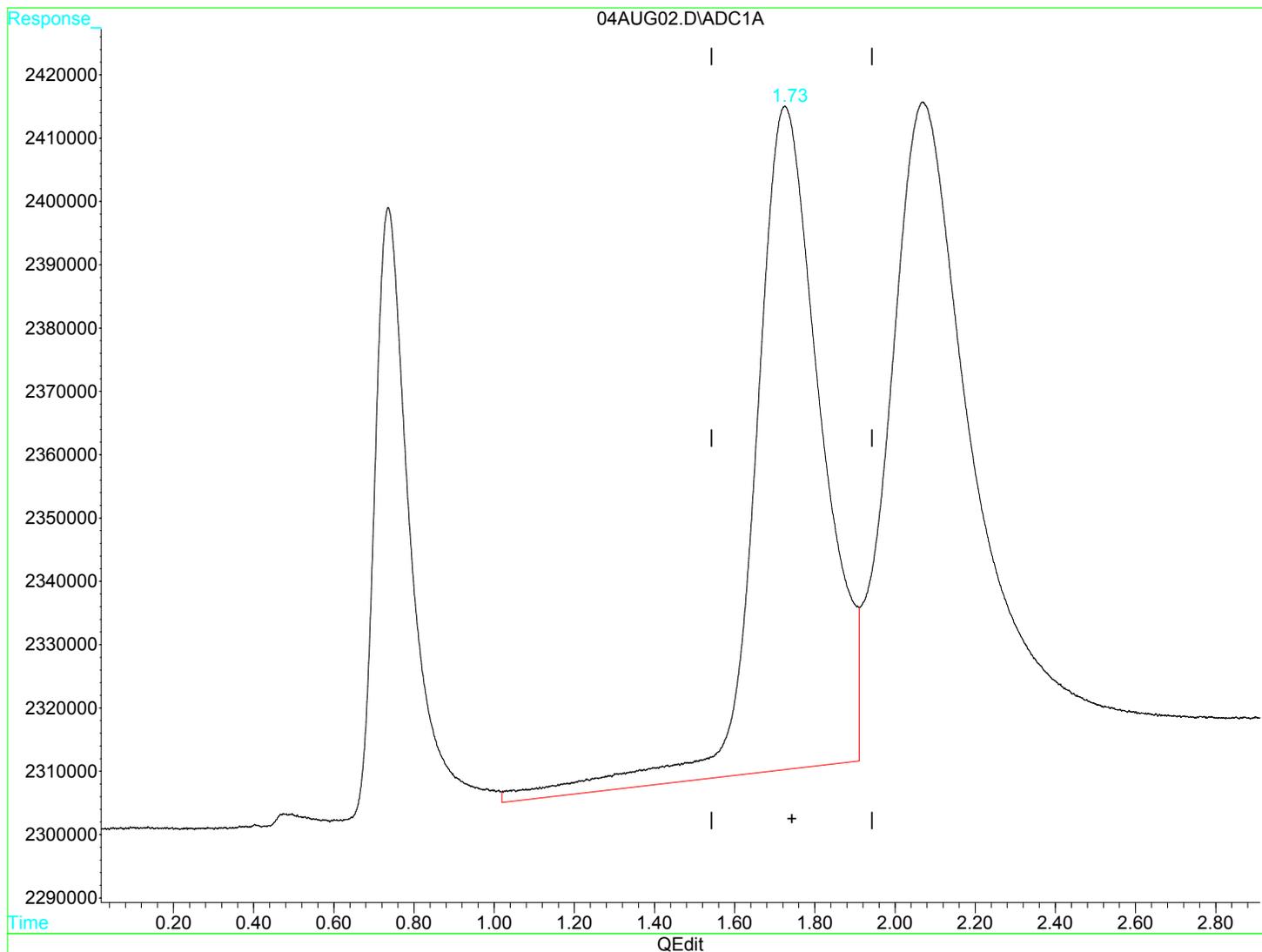


(1) Methane (m)
 0.74min 9.709ug/L
 response 5876773

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
 Acq On : 4 Aug 2017 6:36 am Operator: JH2
 Sample : 1713774-CCV1 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 6:52 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

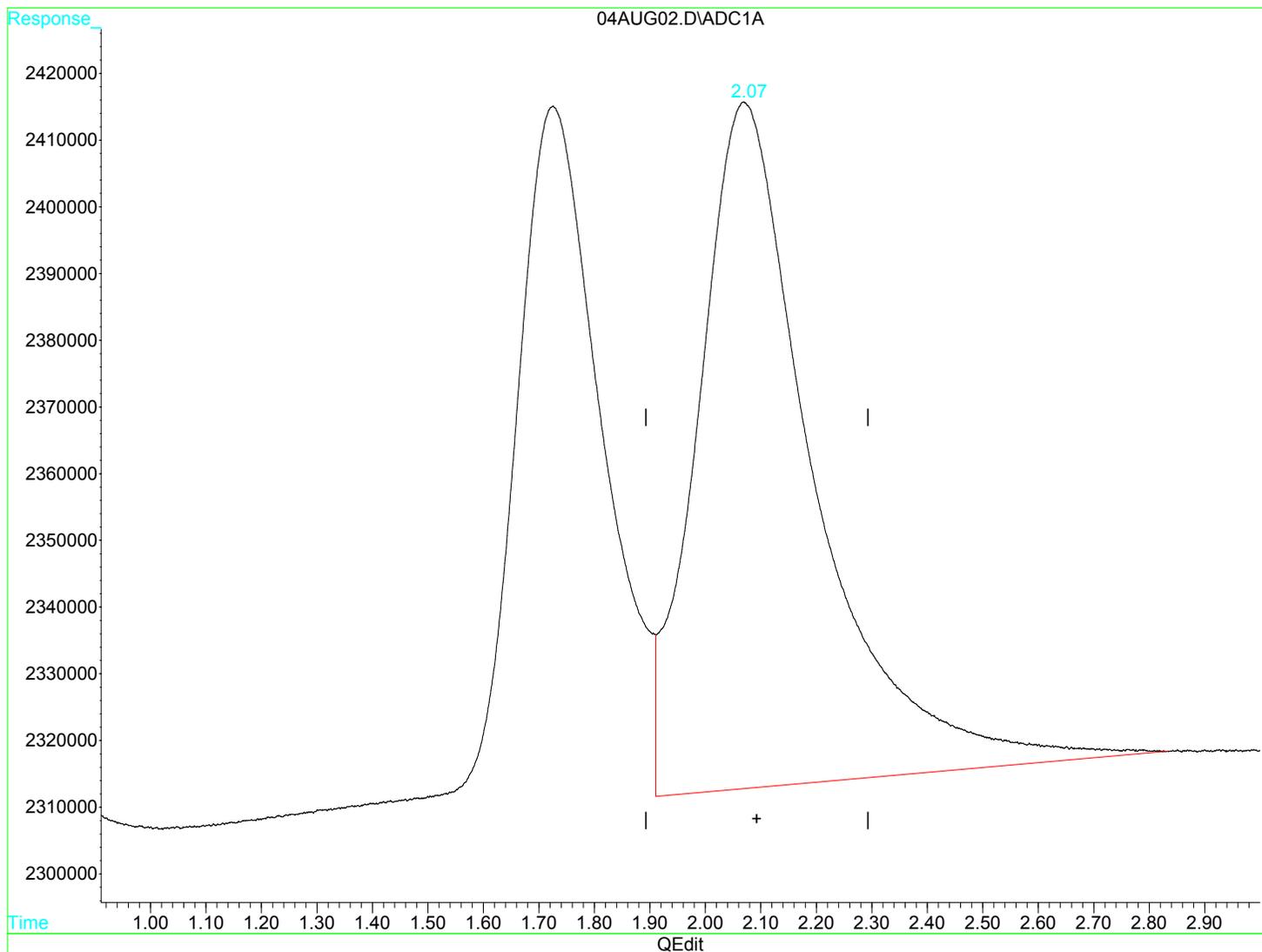


(2) Ethene (m)
 1.73min 29.856ug/L
 response 12016392

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
Acq On : 4 Aug 2017 6:36 am Operator: JH2
Sample : 1713774-CCV1 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 6:52 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration

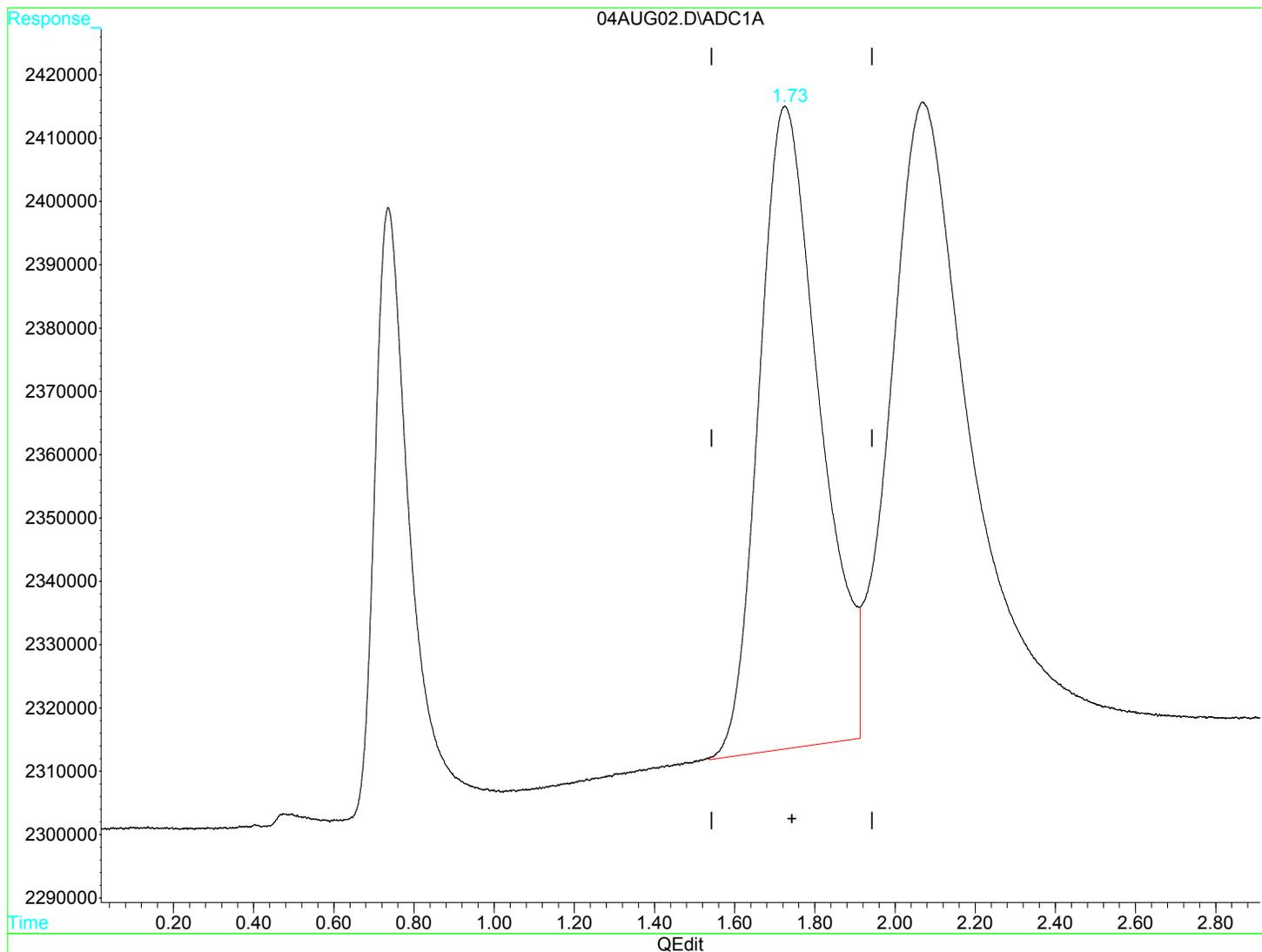


(3) Ethane (m)
2.07min 26.048ug/L
response 15131671

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
 Acq On : 4 Aug 2017 6:36 am Operator: JH2
 Sample : 1713774-CCV1 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 6:52 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

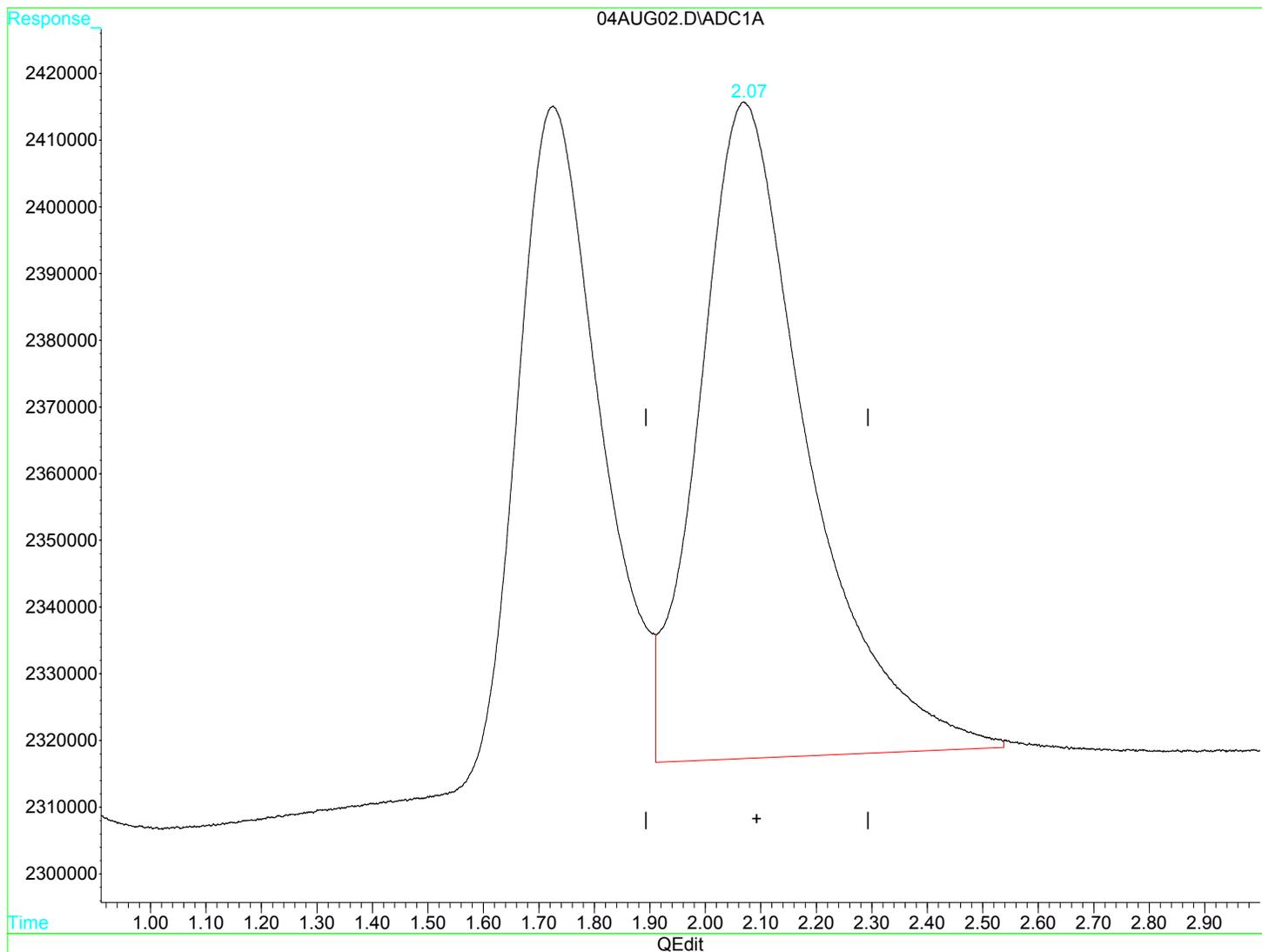
1.73min 26.449ug/L m

response 10645124

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
Acq On : 4 Aug 2017 6:36 am Operator: JH2
Sample : 1713774-CCV1 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 6:52 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)
2.07min 23.002ug/L m
response 13361975

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
 Acq On : 4 Aug 2017 7:33 am Operator: JH2
 Sample : 1713774-CCV2 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:03 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

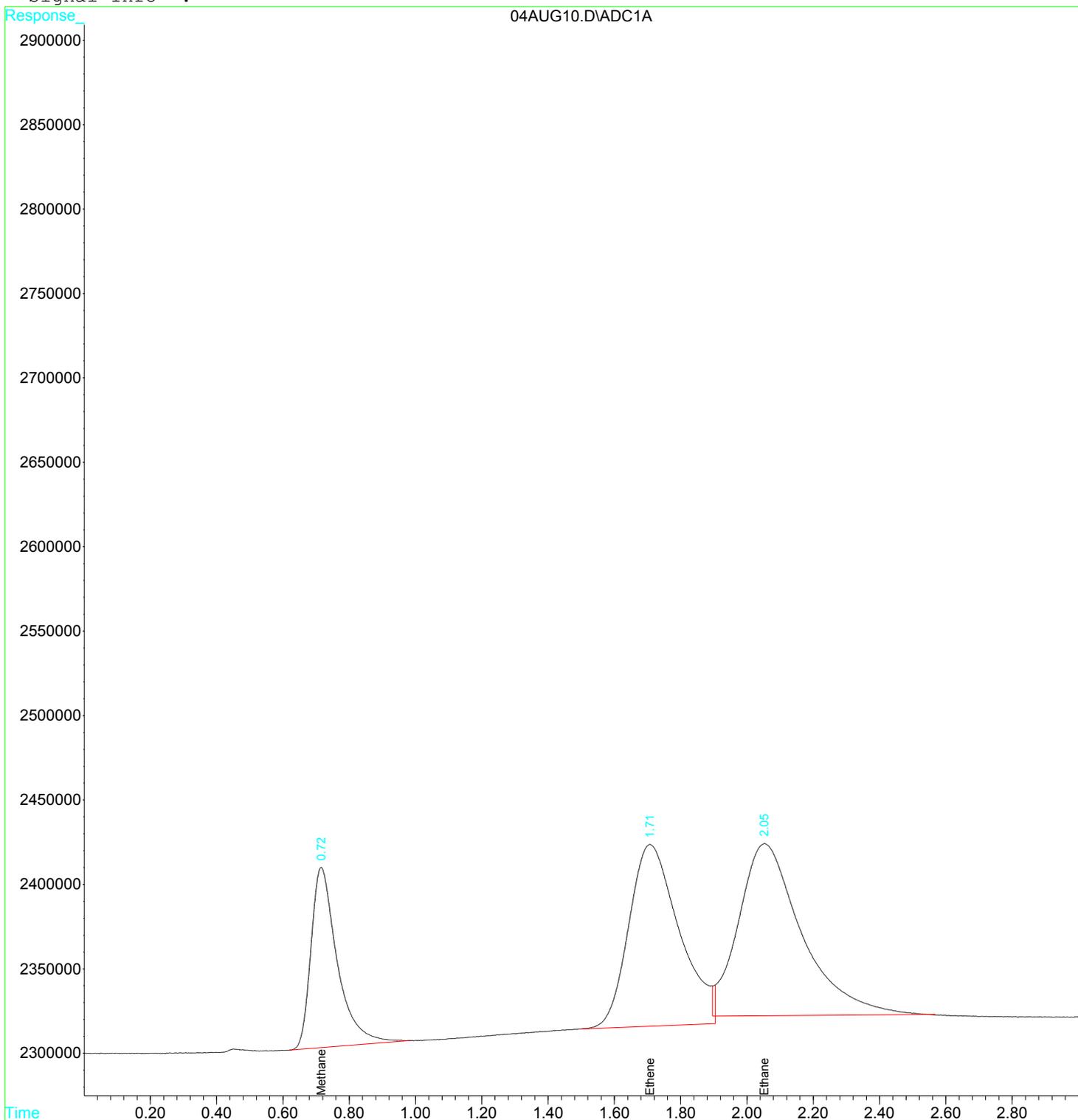
Target Compounds			
1) m Methane	0.72	5859882	9.6811 ug/L m
2) m Ethene	1.71	11414816	28.3614 ug/L m
3) m Ethane	2.05	13516370	23.2675 ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
Acq On : 4 Aug 2017 7:33 am Operator: JH2
Sample : 1713774-CCV2 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:03 2017 Quant Results File: RSK175.RES

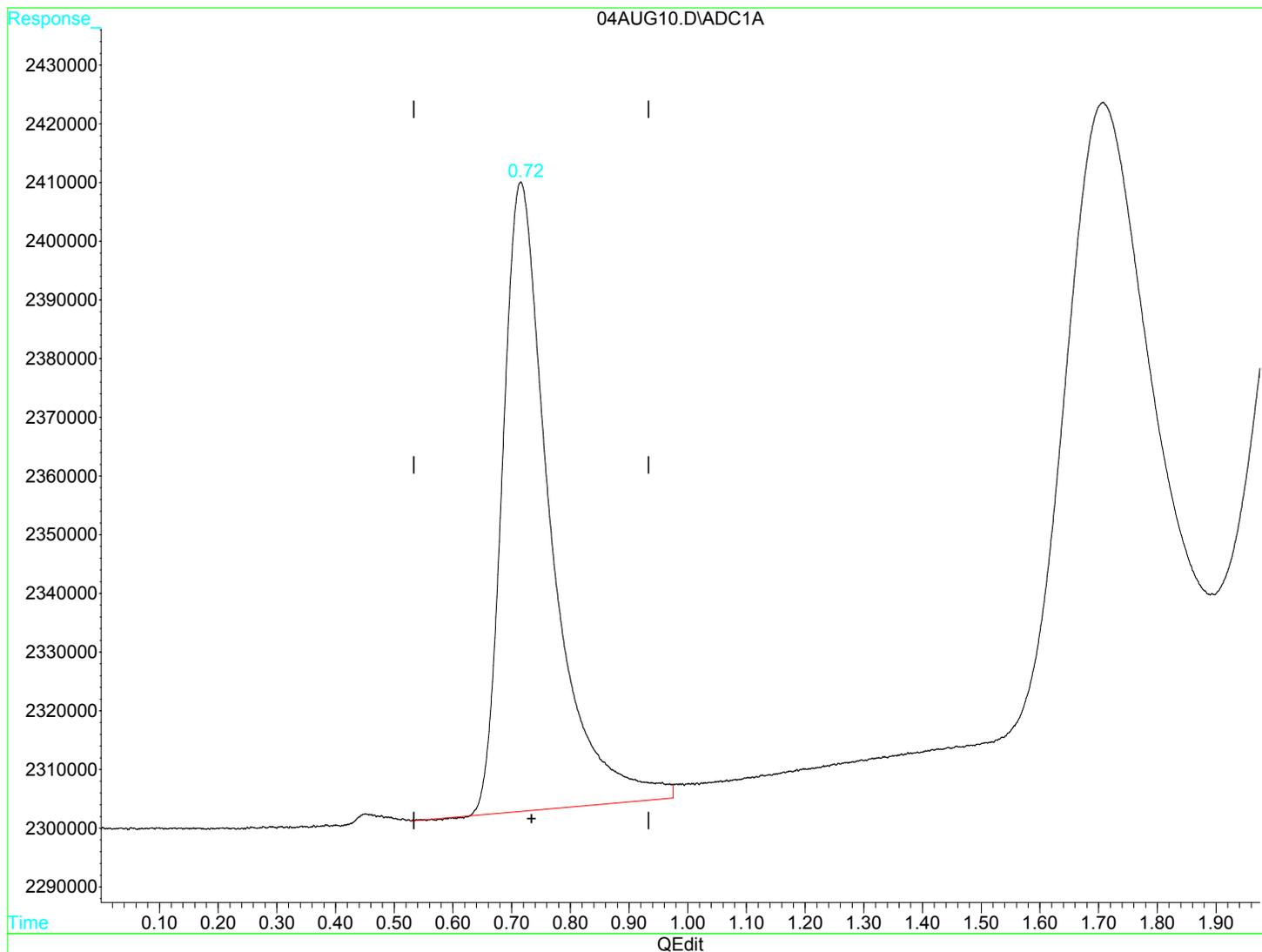
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
 Acq On : 4 Aug 2017 7:33 am Operator: JH2
 Sample : 1713774-CCV2 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

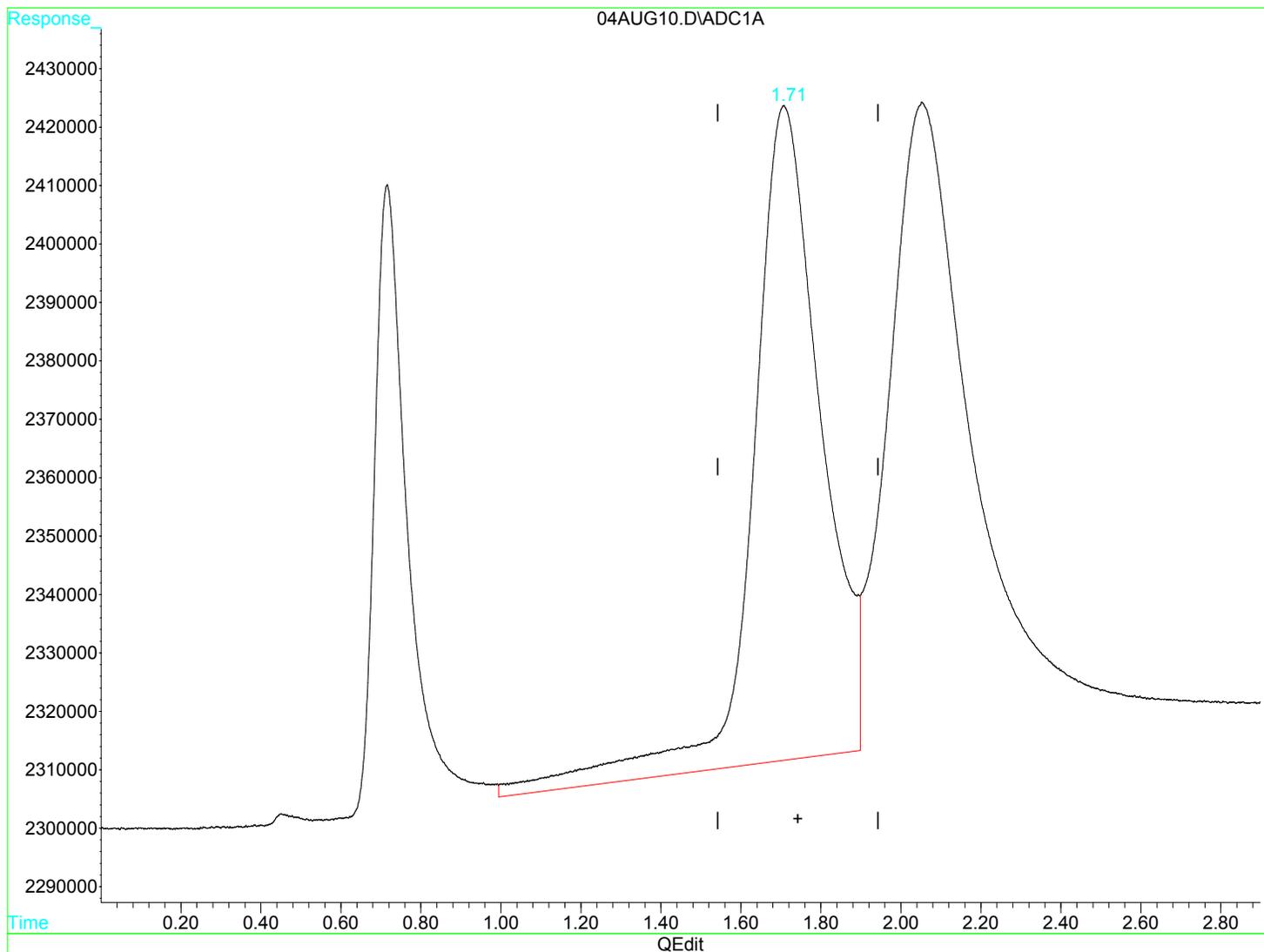


(1) Methane (m)
 0.72min 10.043ug/L
 response 6078716

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
 Acq On : 4 Aug 2017 7:33 am Operator: JH2
 Sample : 1713774-CCV2 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

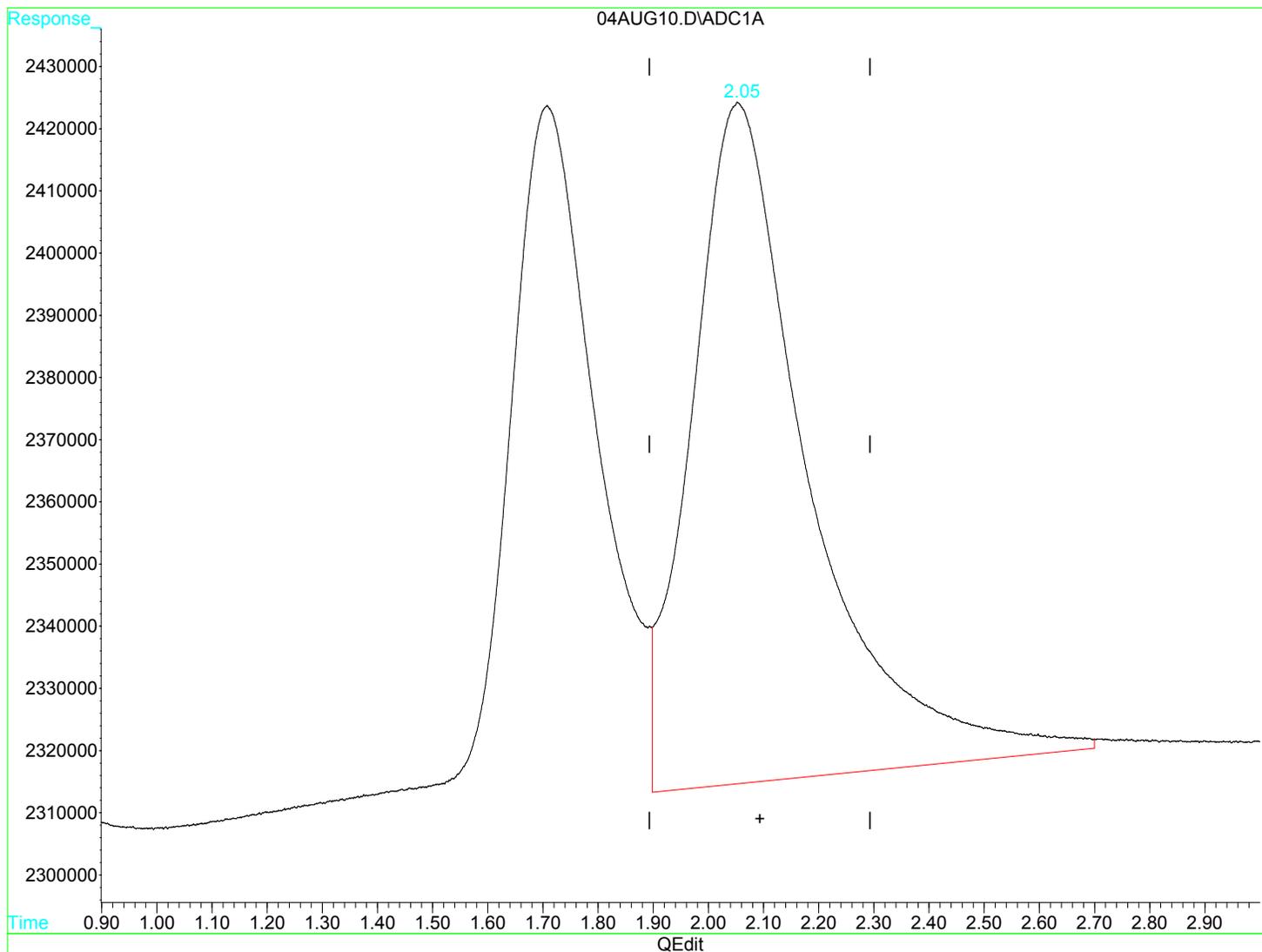


(2) Ethene (m)
 1.71min 33.153ug/L
 response 13343359

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
 Acq On : 4 Aug 2017 7:33 am Operator: JH2
 Sample : 1713774-CCV2 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)

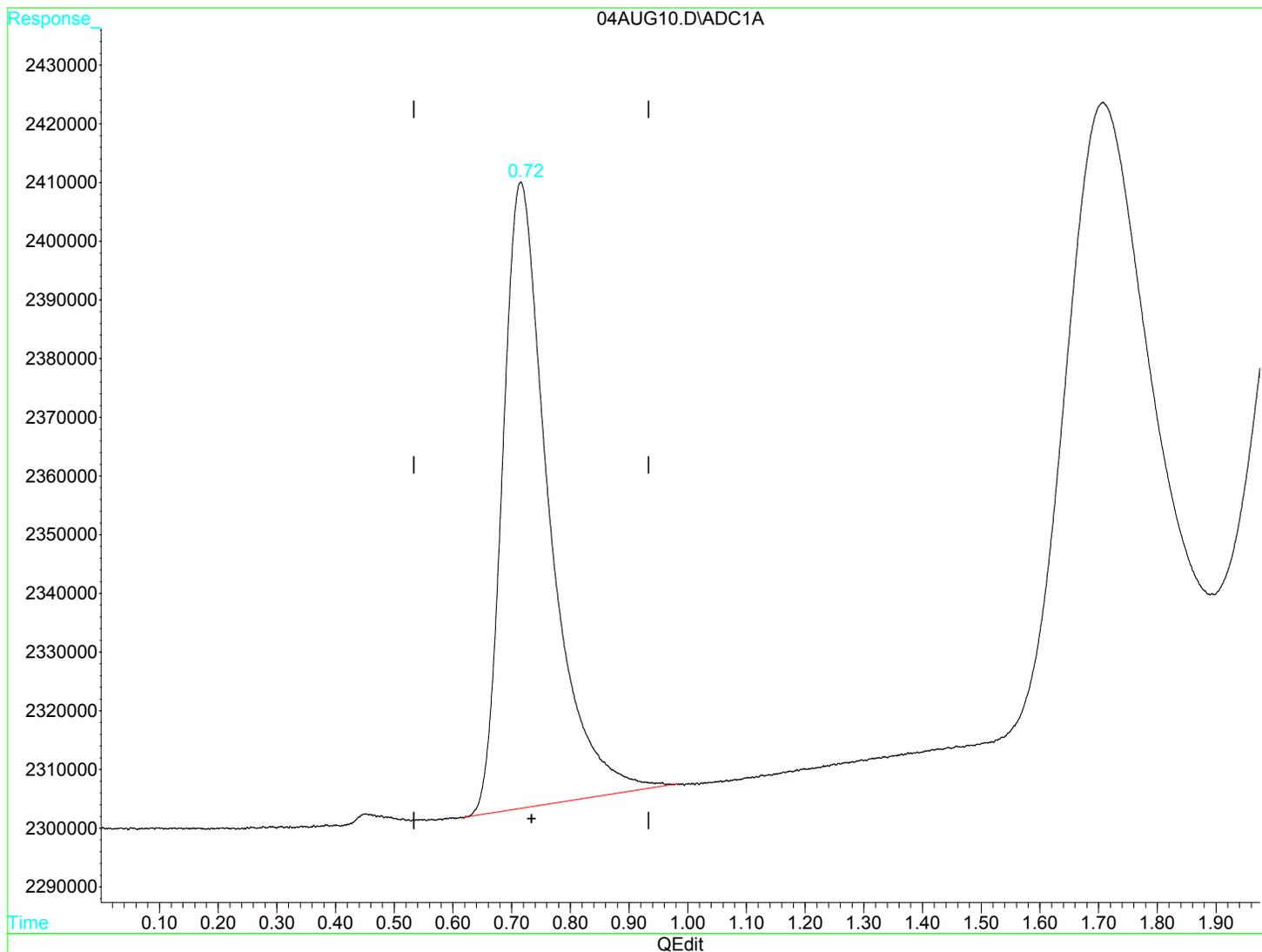
2.05min 27.872ug/L

response 16191007

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
 Acq On : 4 Aug 2017 7:33 am Operator: JH2
 Sample : 1713774-CCV2 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

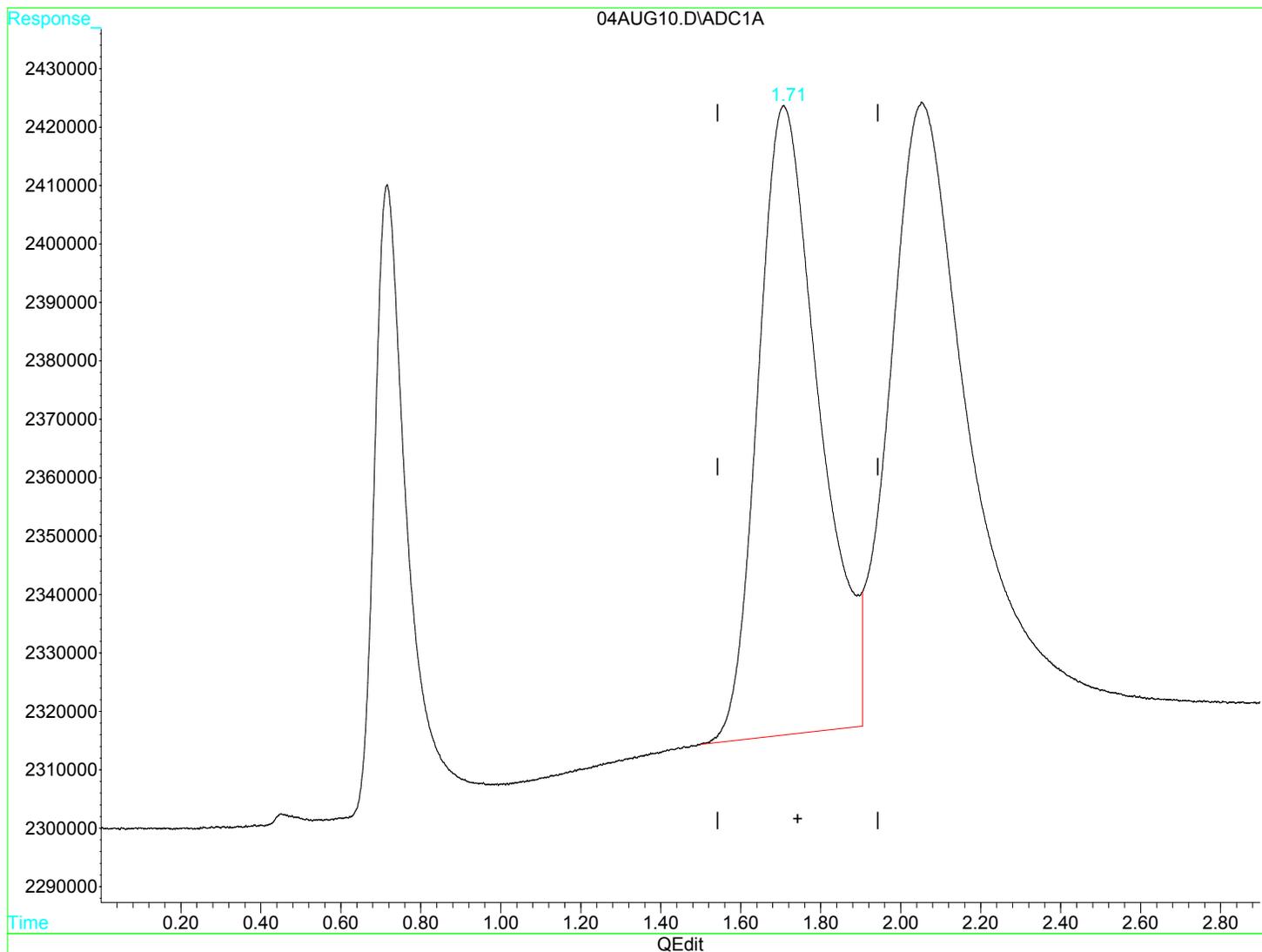


(1) Methane (m)
 0.72min 9.681ug/L m
 response 5859882

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
 Acq On : 4 Aug 2017 7:33 am Operator: JH2
 Sample : 1713774-CCV2 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

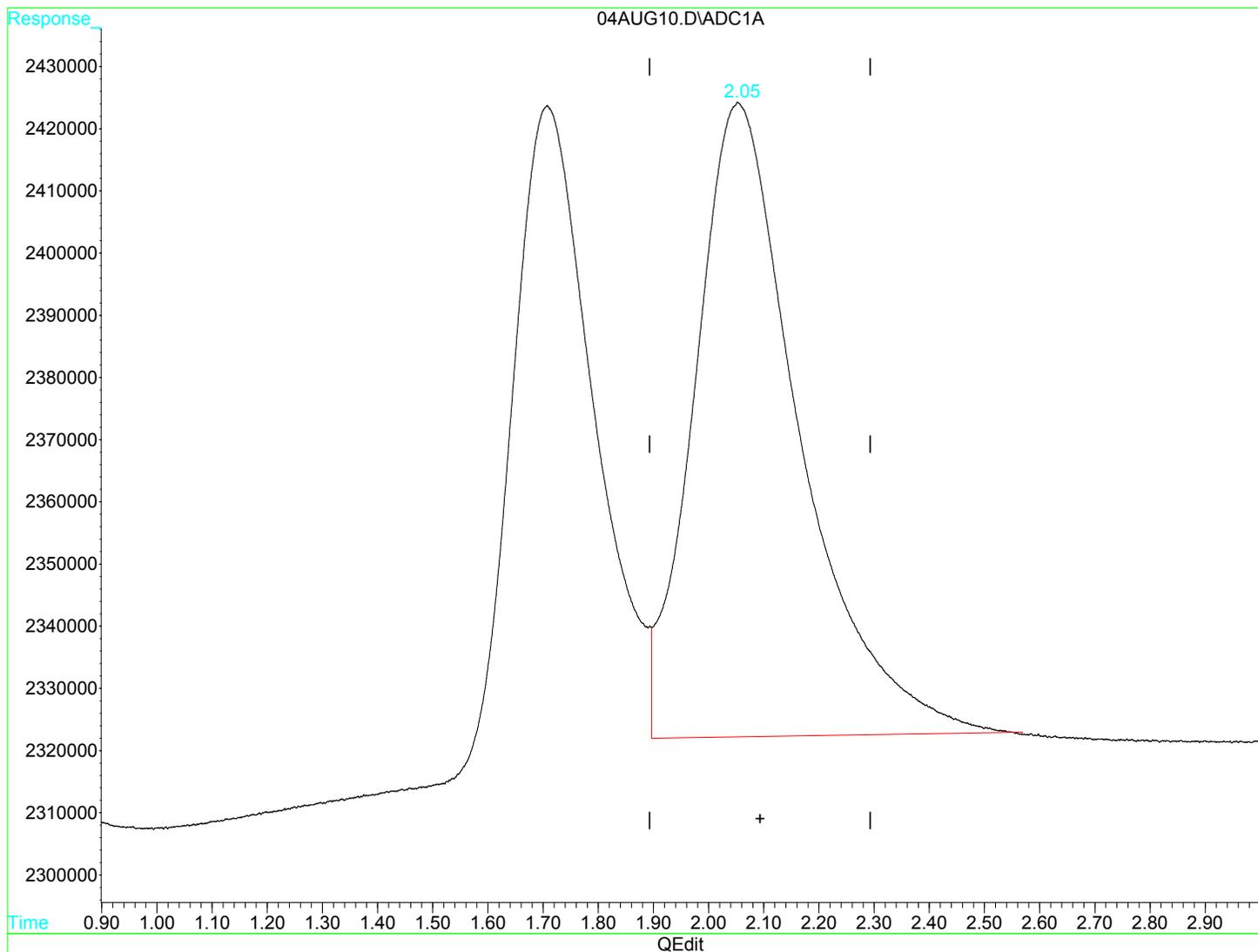
1.71min 28.361ug/L m

response 11414816

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
 Acq On : 4 Aug 2017 7:33 am Operator: JH2
 Sample : 1713774-CCV2 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 2.05min 23.267ug/L m
 response 13516370

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
 Acq On : 4 Aug 2017 10:29 am Operator: JH2
 Sample : 1713774-CCV3 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:09 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

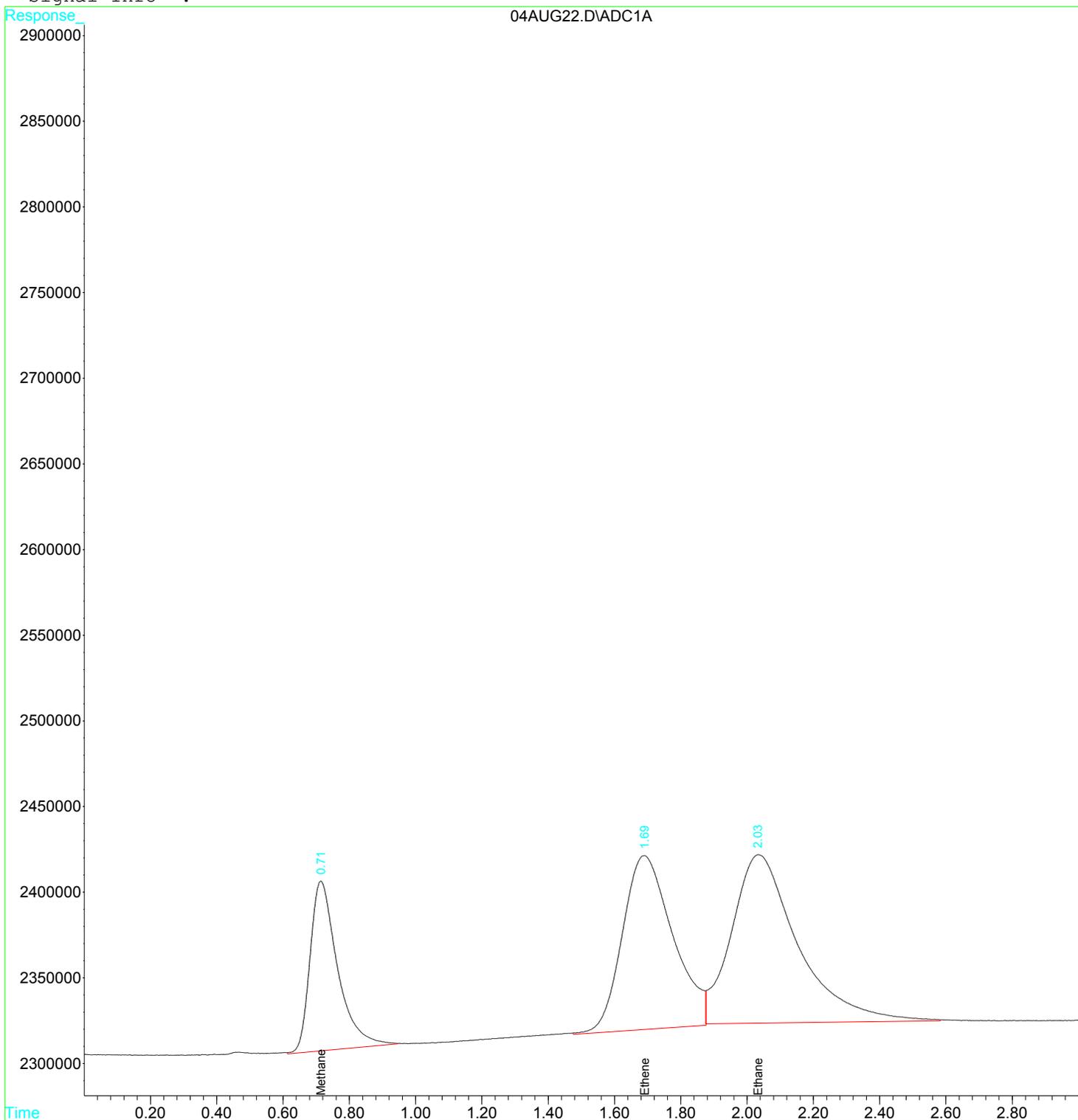
Target Compounds			
1) m Methane	0.71	5696573	9.4113 ug/L m
2) m Ethene	1.69	10748744	26.7065 ug/L m
3) m Ethane	2.03	13659810	23.5144 ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:09 2017 Quant Results File: RSK175.RES

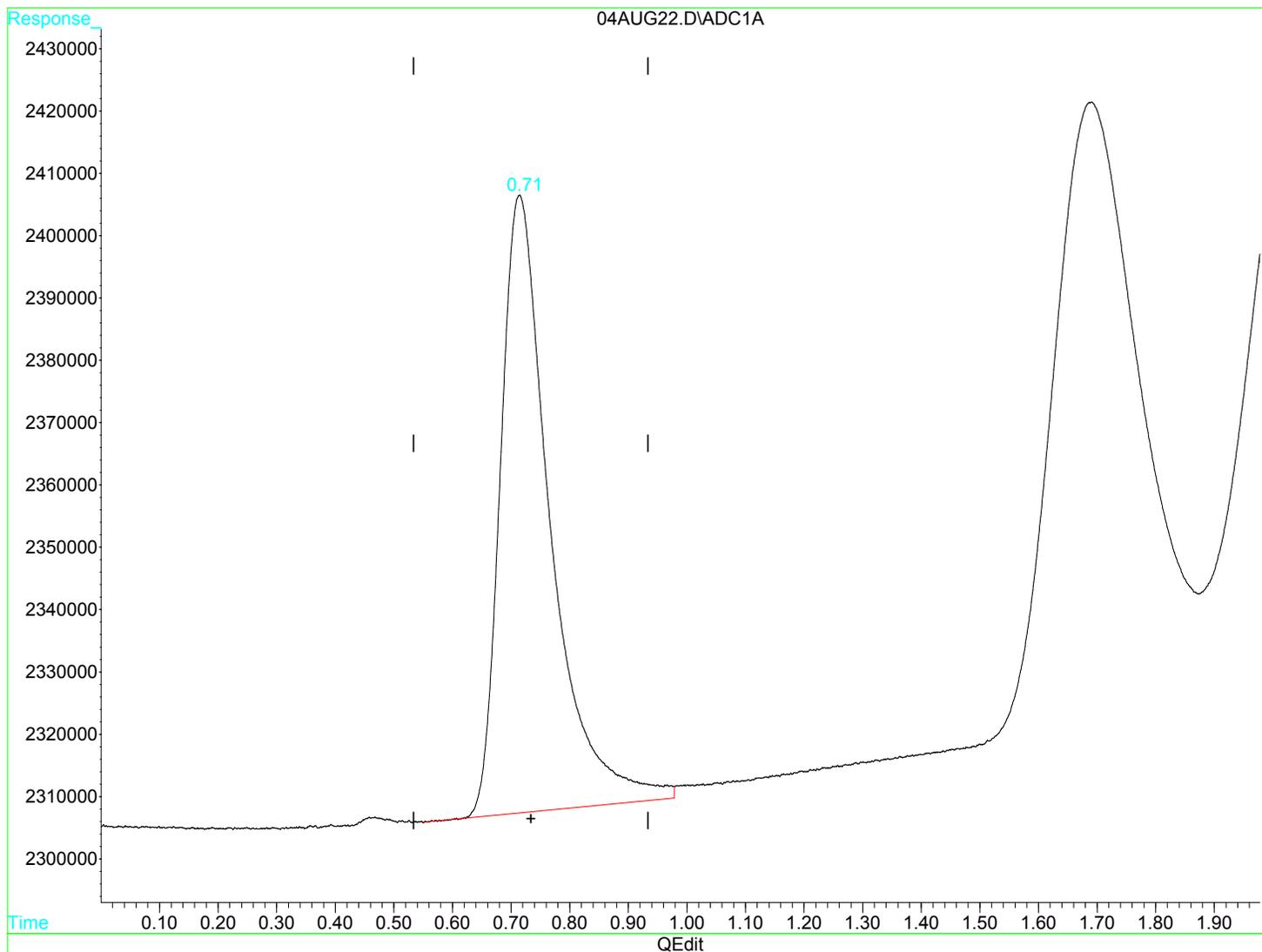
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration

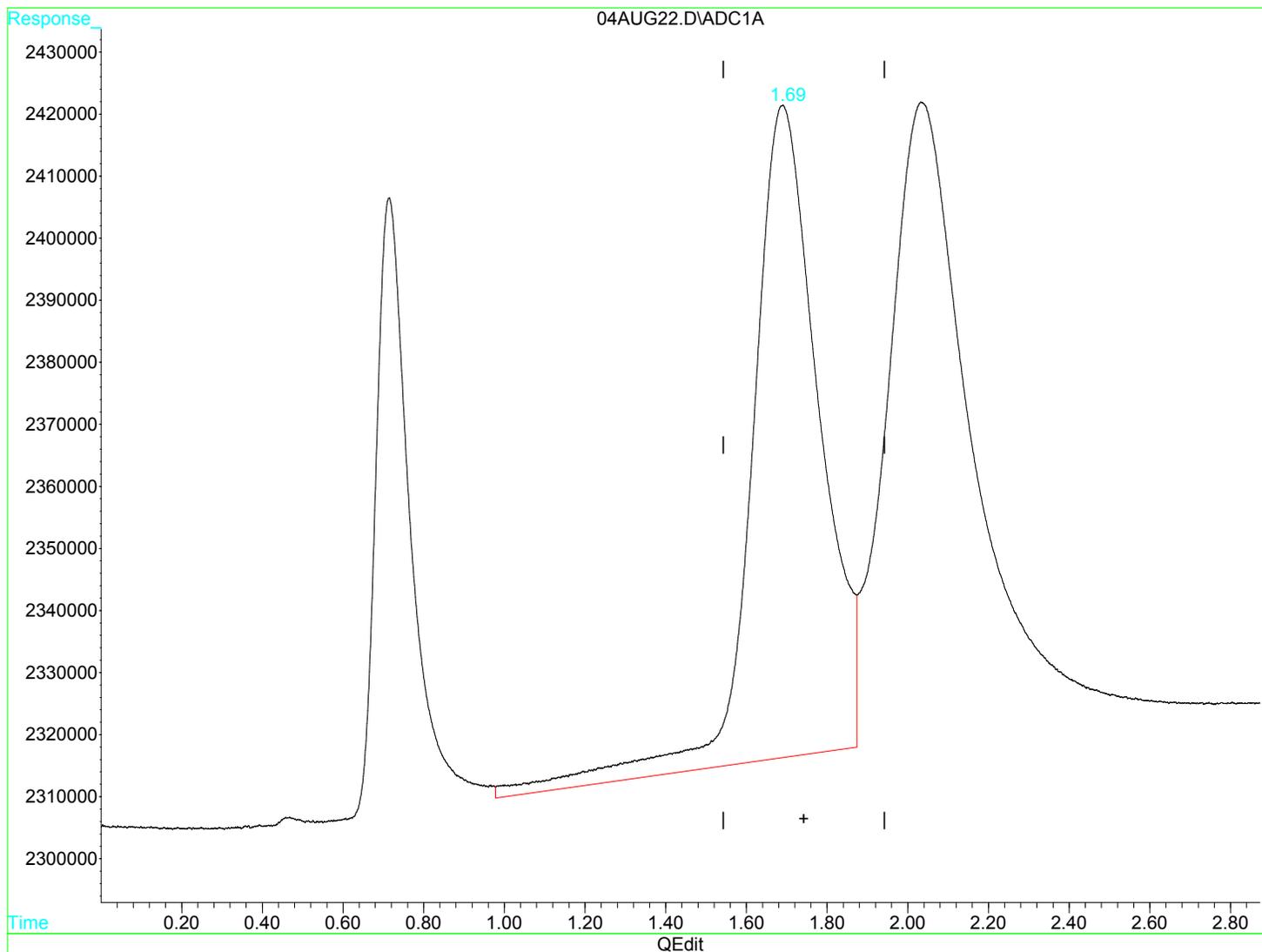


(1) Methane (m)
0.71min 9.693ug/L
response 5867334

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
 Acq On : 4 Aug 2017 10:29 am Operator: JH2
 Sample : 1713774-CCV3 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

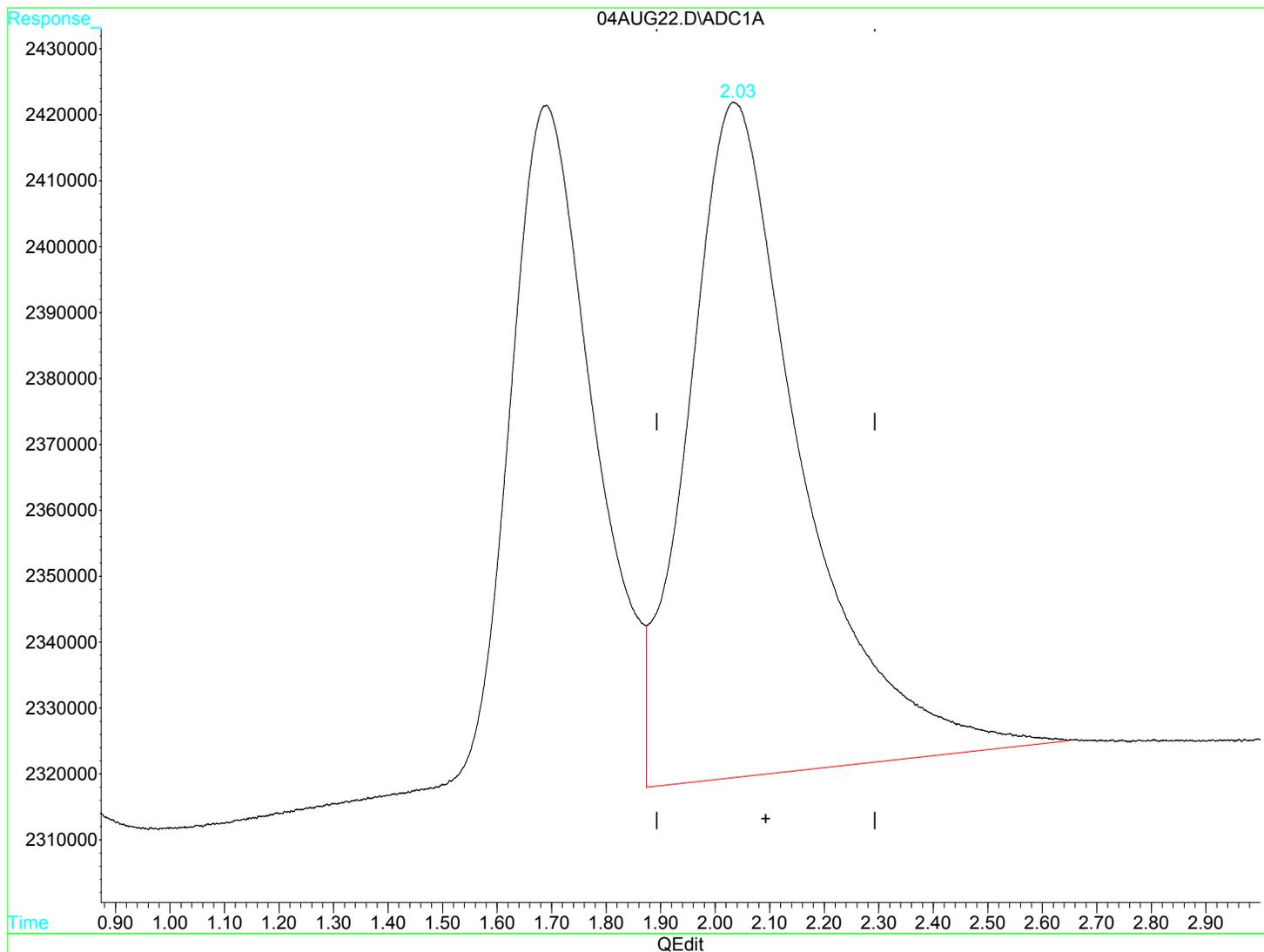


(2) Ethene (m)
 1.69min 30.451ug/L
 response 12255970

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

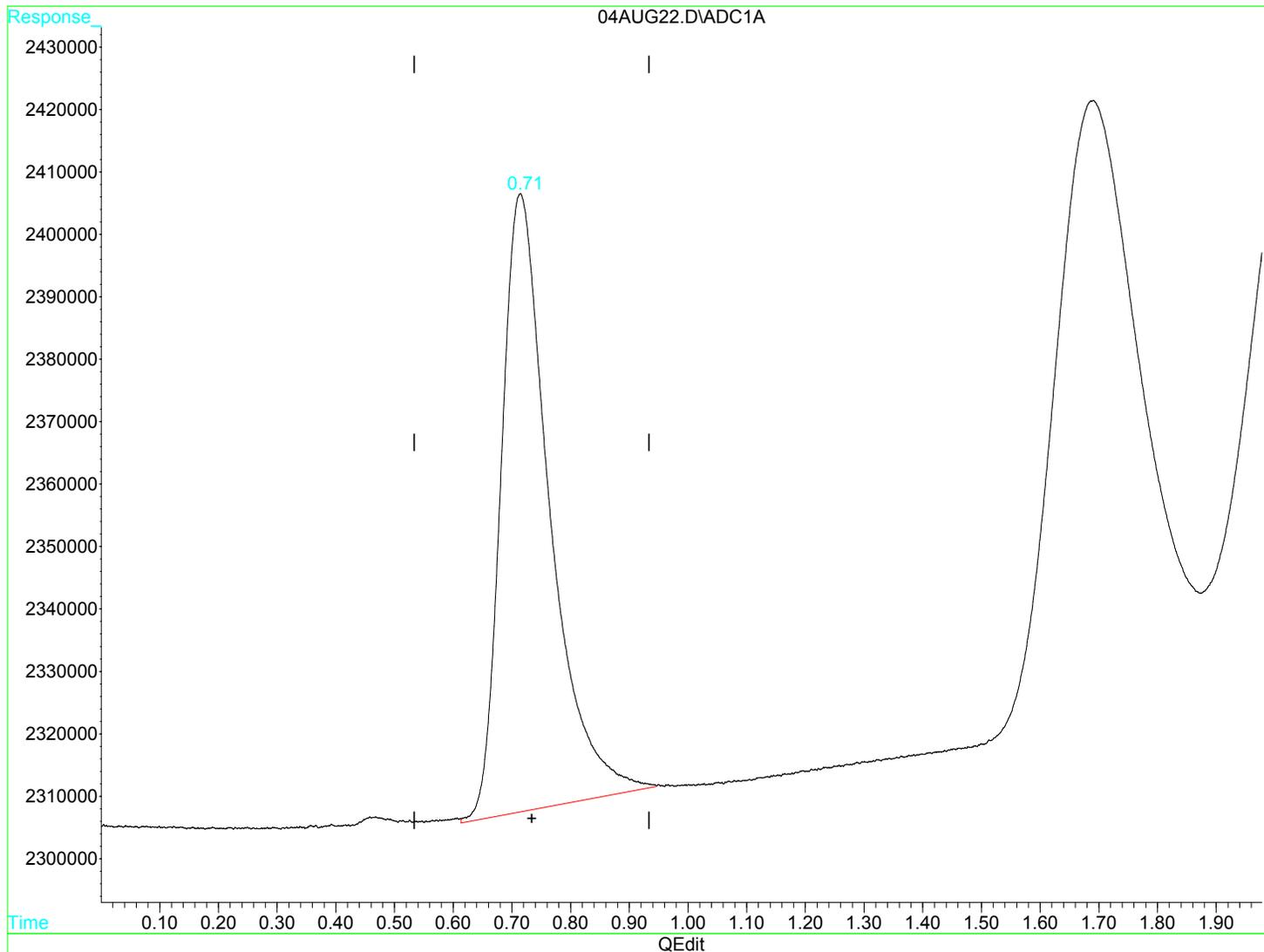
2.03min 25.653ug/L

response 14902122

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
 Acq On : 4 Aug 2017 10:29 am Operator: JH2
 Sample : 1713774-CCV3 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

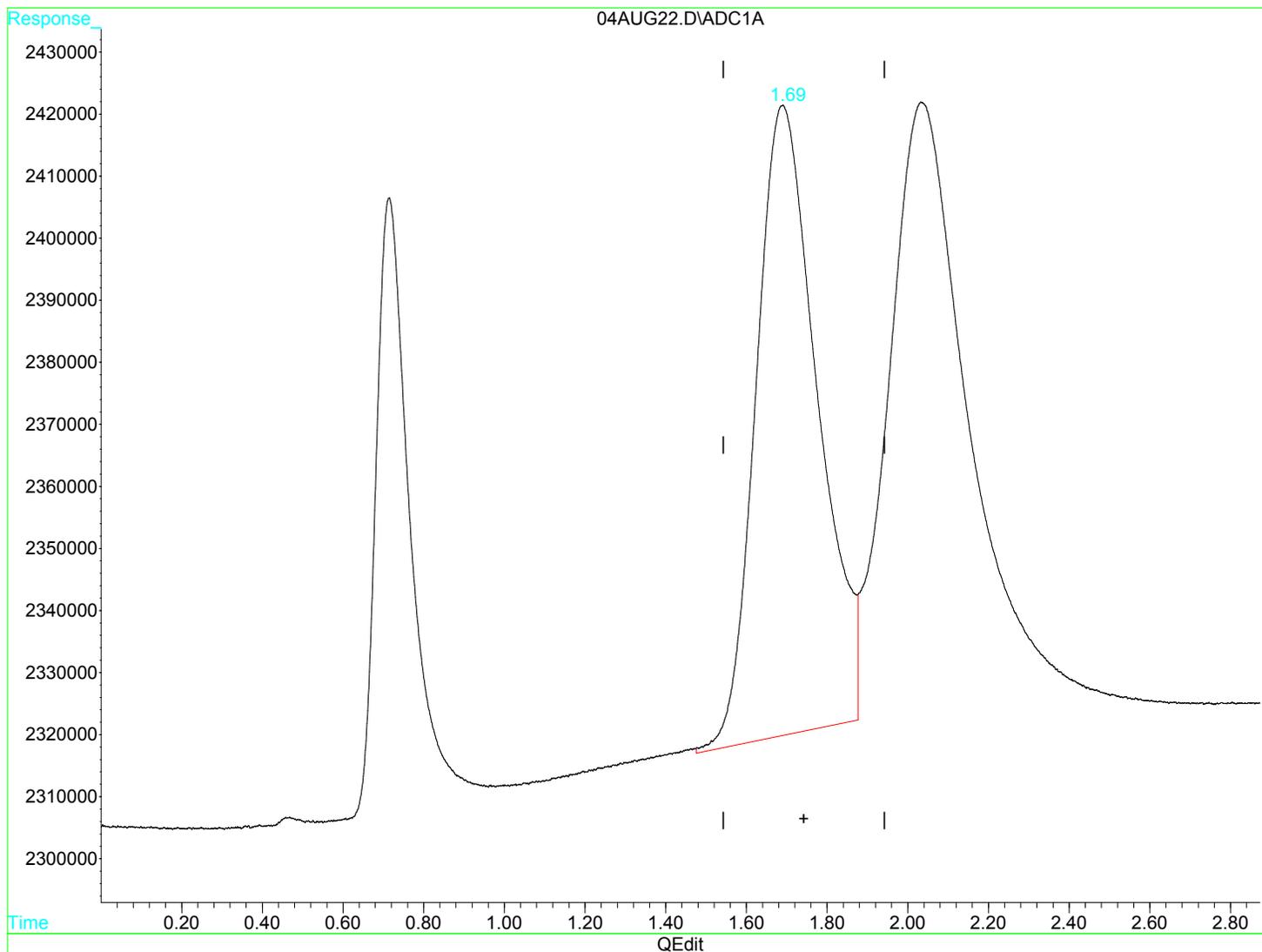


(1) Methane (m)
 0.71min 9.411ug/L m
 response 5696573

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
 Acq On : 4 Aug 2017 10:29 am Operator: JH2
 Sample : 1713774-CCV3 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

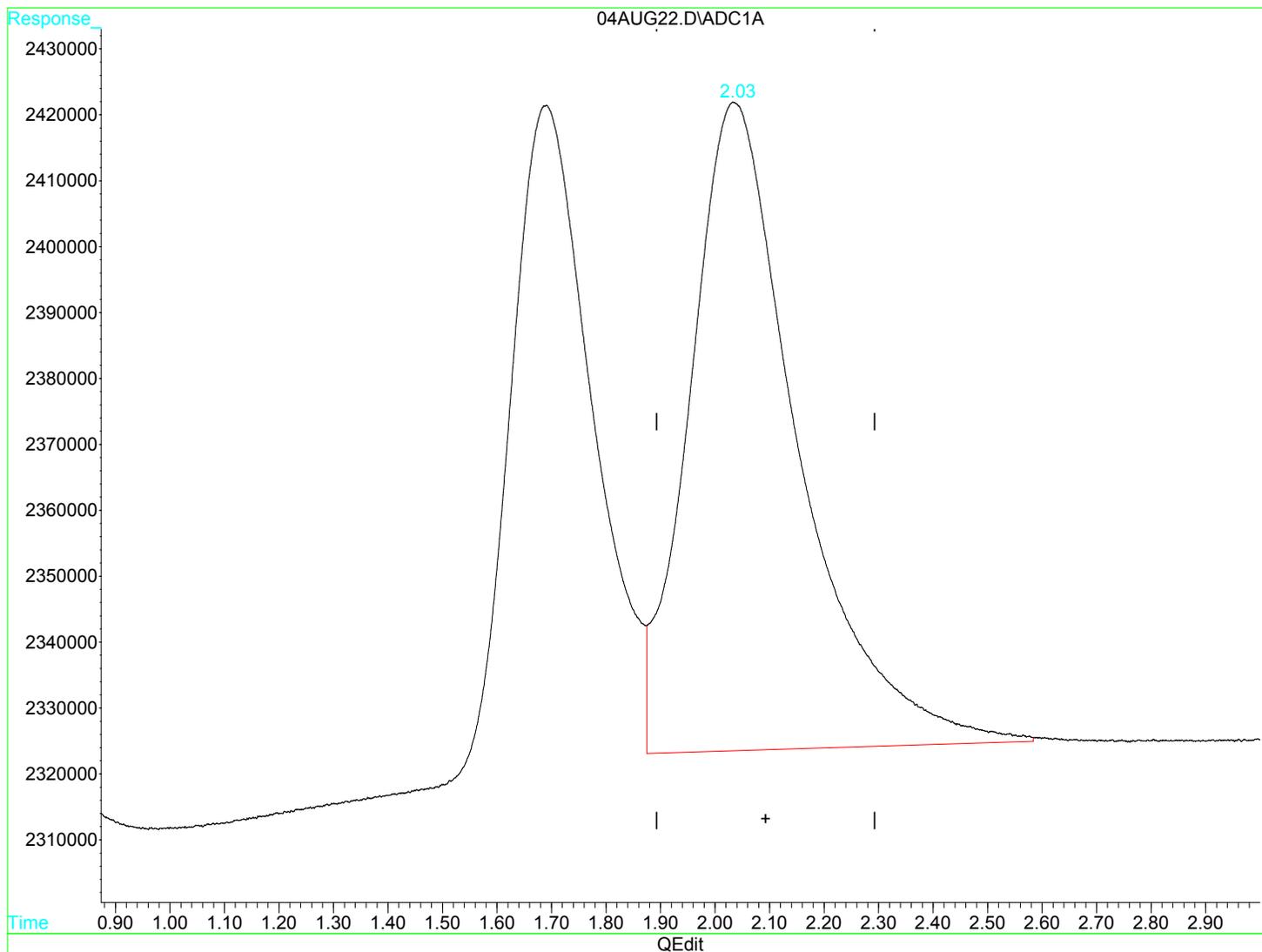
1.69min 26.706ug/L m

response 10748744

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
 Acq On : 4 Aug 2017 10:29 am Operator: JH2
 Sample : 1713774-CCV3 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)

2.03min 23.514ug/L m

response 13659810

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
 Acq On : 4 Aug 2017 12:45 pm Operator: JH2
 Sample : 1713774-CCV4 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:16 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

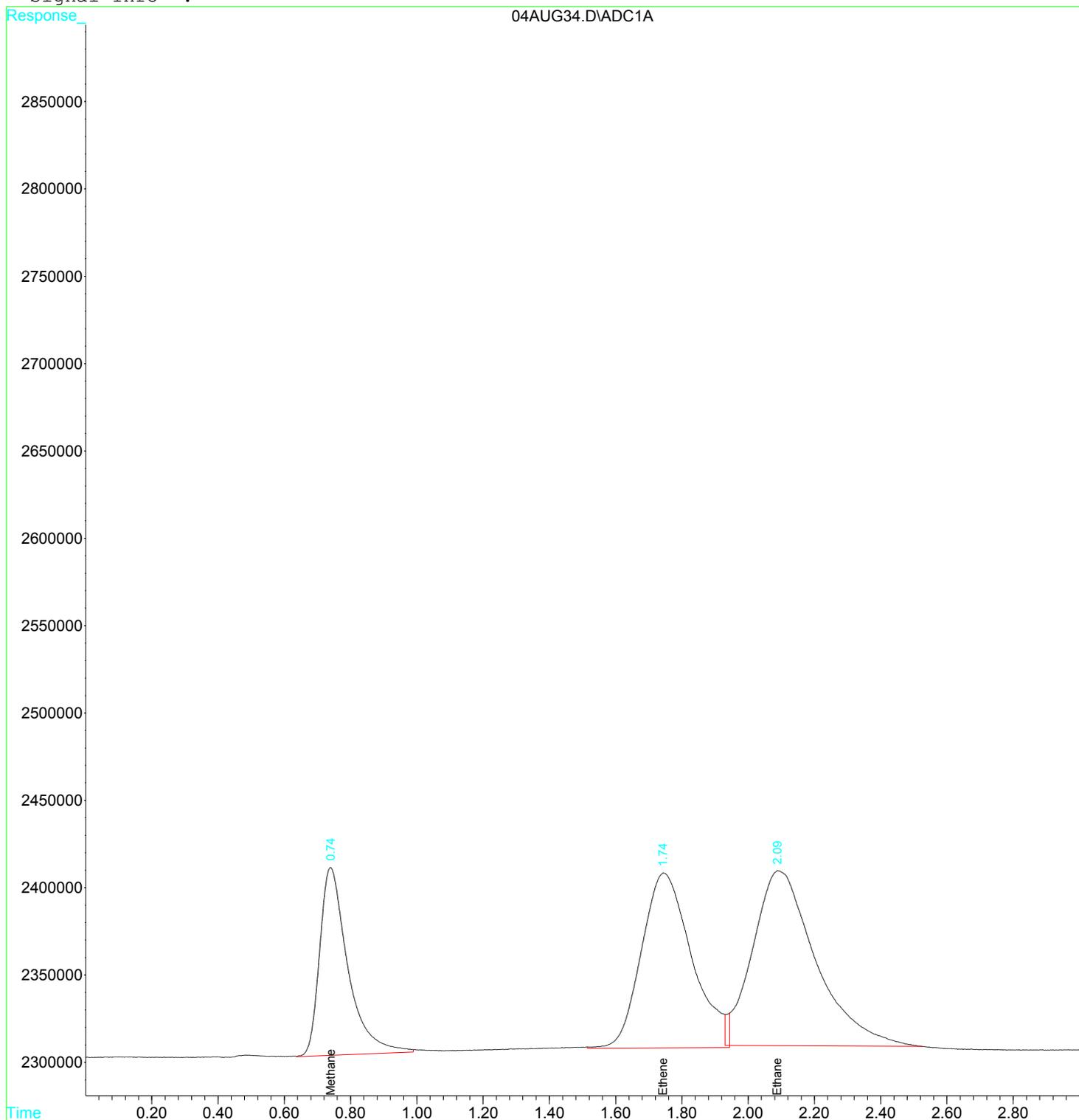
Target Compounds			
1) m Methane	0.74	6354871	10.4988 ug/L m
2) m Ethene	1.74	10657829	26.4806 ug/L m
3) m Ethane	2.09	13319616	22.9288 ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
Acq On : 4 Aug 2017 12:45 pm Operator: JH2
Sample : 1713774-CCV4 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:16 2017 Quant Results File: RSK175.RES

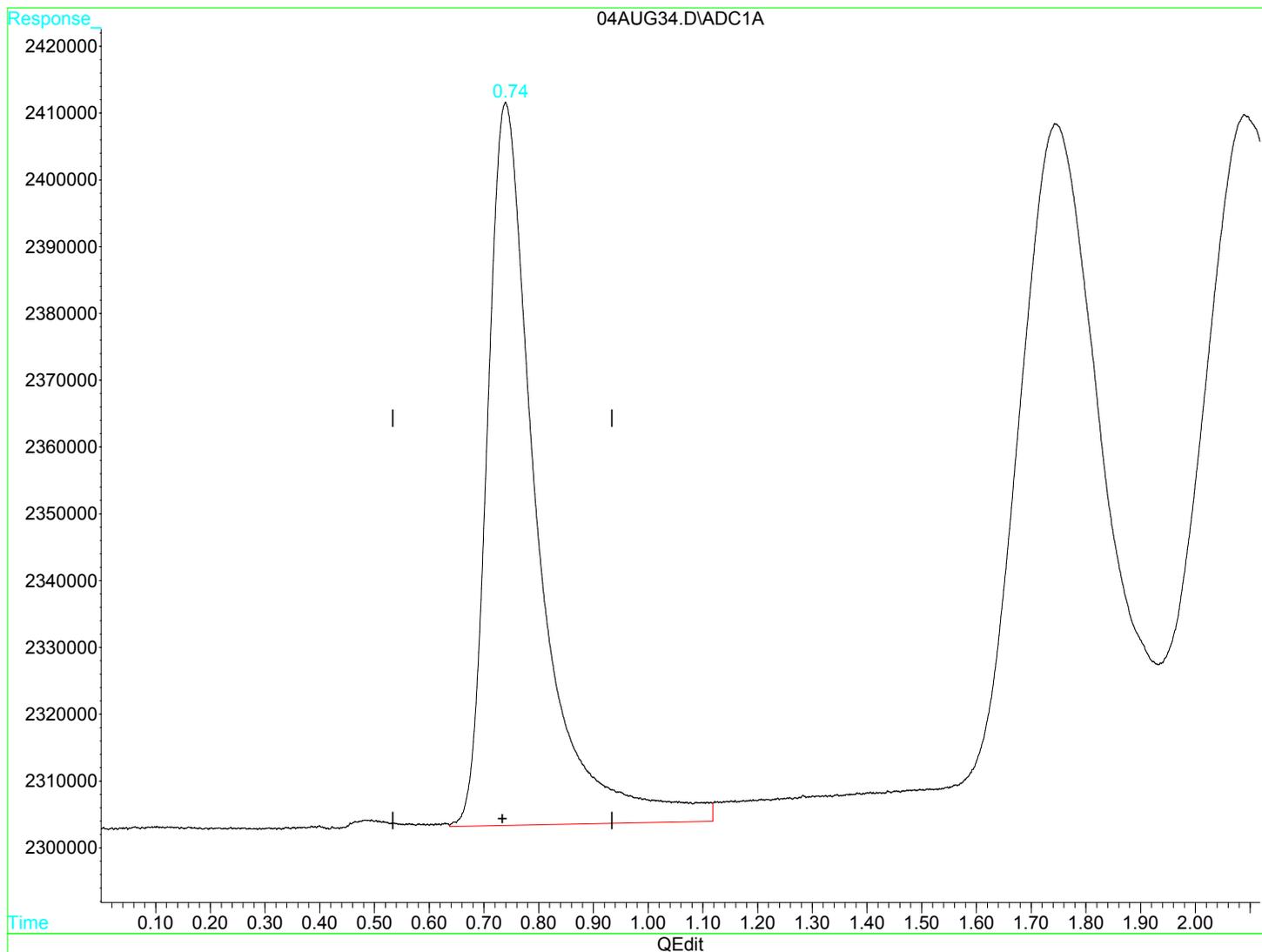
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
 Acq On : 4 Aug 2017 12:45 pm Operator: JH2
 Sample : 1713774-CCV4 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

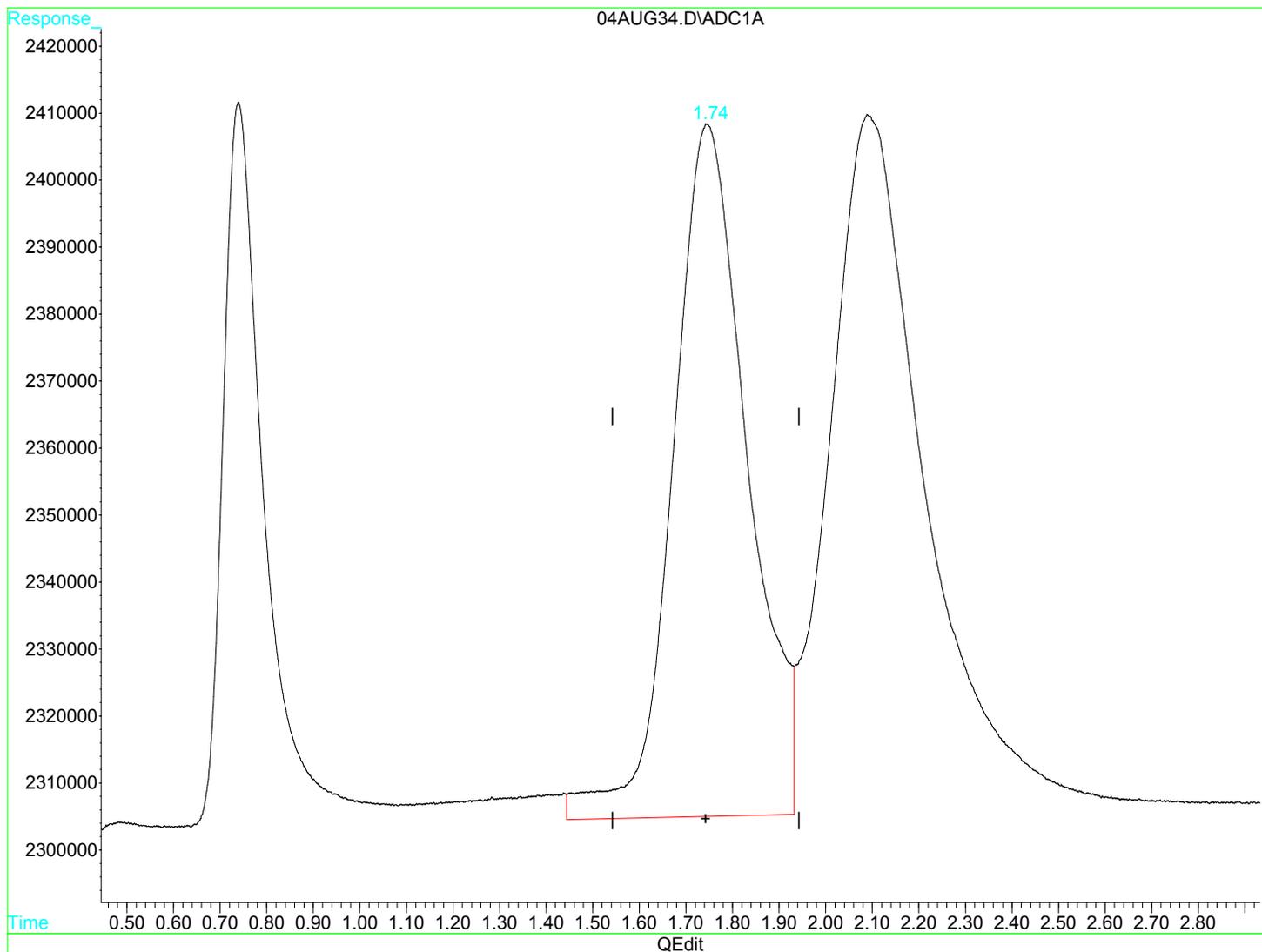


(1) Methane (m)
 0.74min 11.268ug/L
 response 6820676

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
 Acq On : 4 Aug 2017 12:45 pm Operator: JH2
 Sample : 1713774-CCV4 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

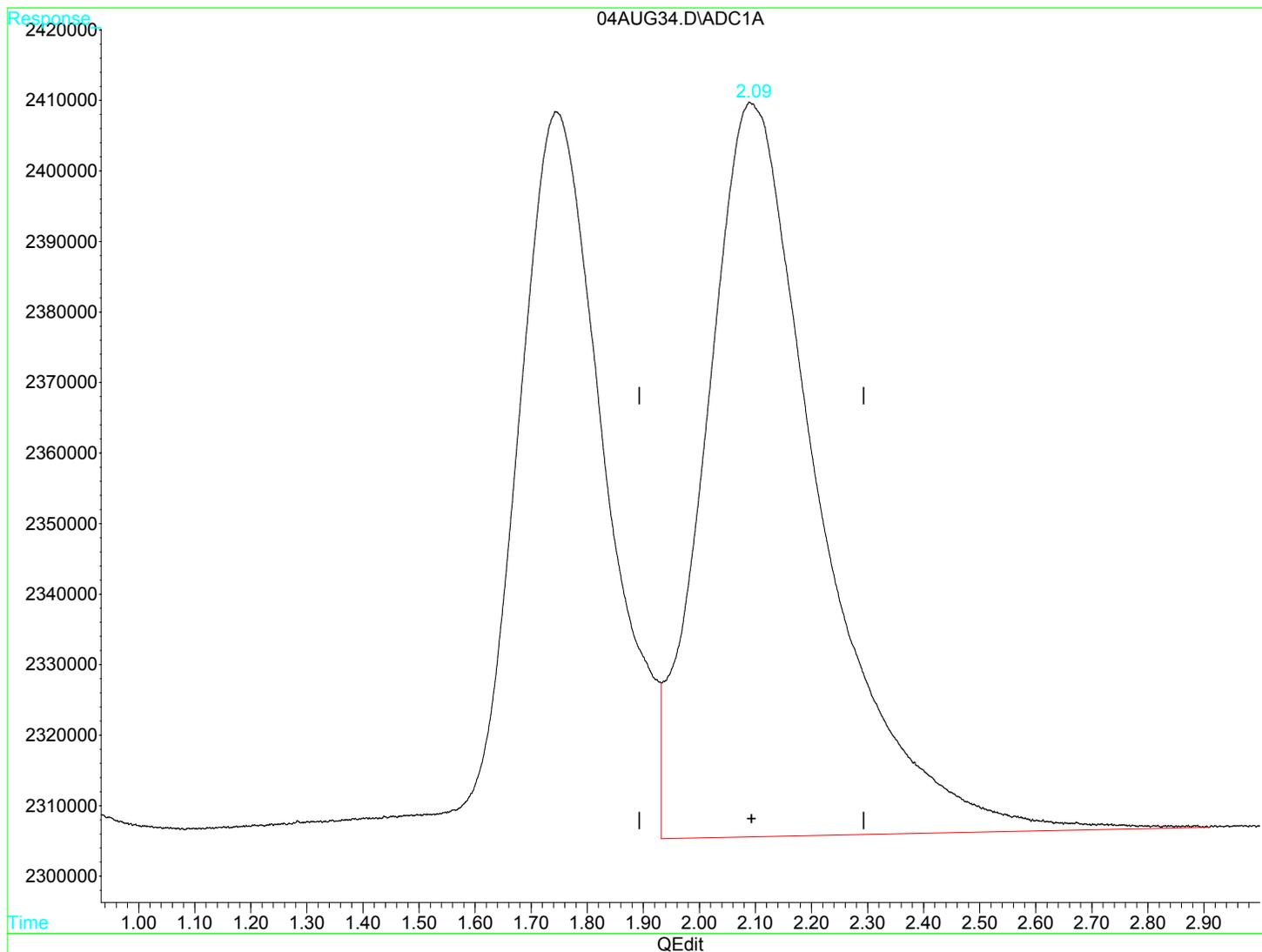


(2) Ethene (m)
 1.75min 28.592ug/L
 response 11507544

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
 Acq On : 4 Aug 2017 12:45 pm Operator: JH2
 Sample : 1713774-CCV4 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

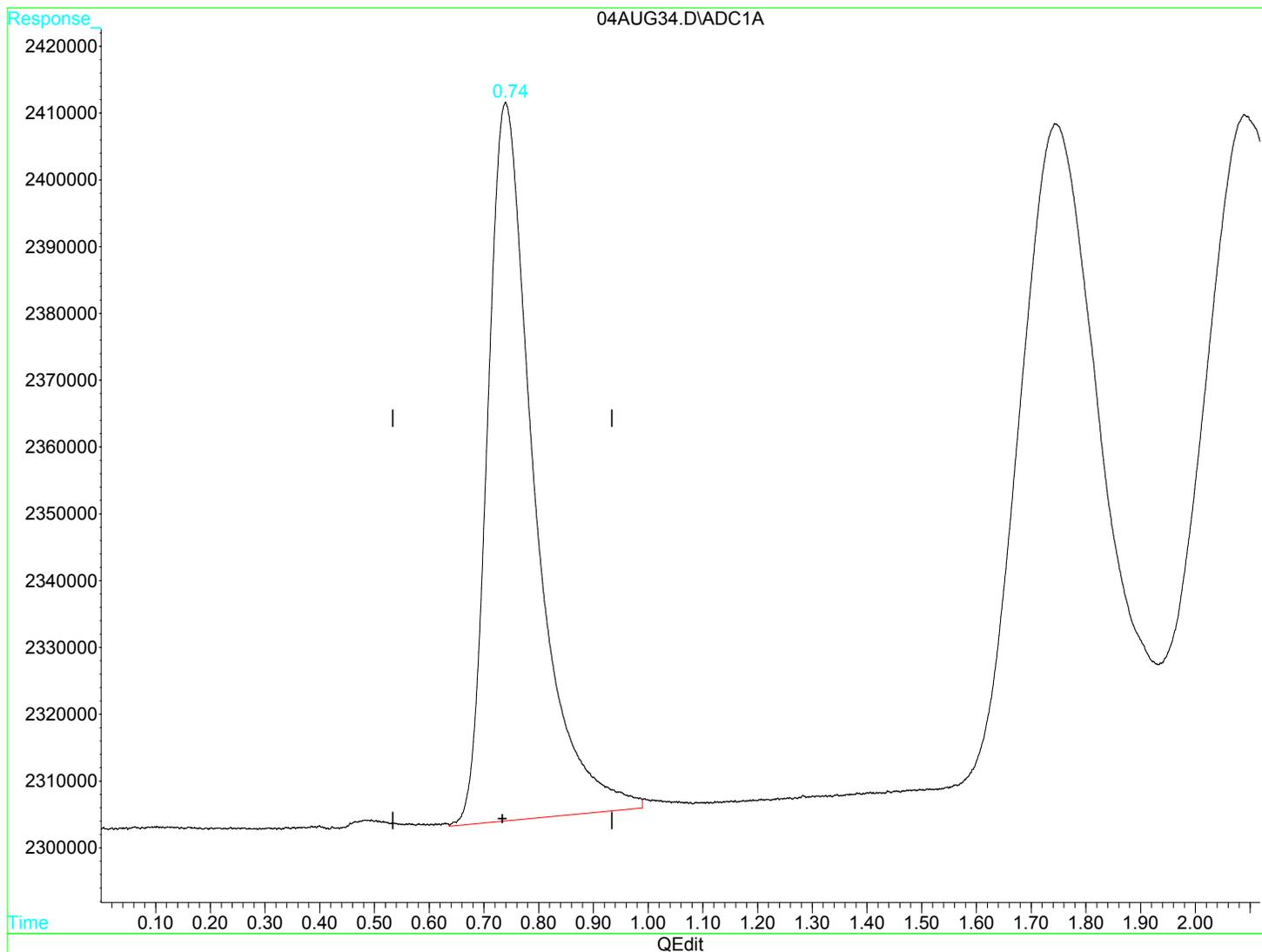


(3) Ethane (m)
 2.09min 25.479ug/L
 response 14800850

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
 Acq On : 4 Aug 2017 12:45 pm Operator: JH2
 Sample : 1713774-CCV4 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

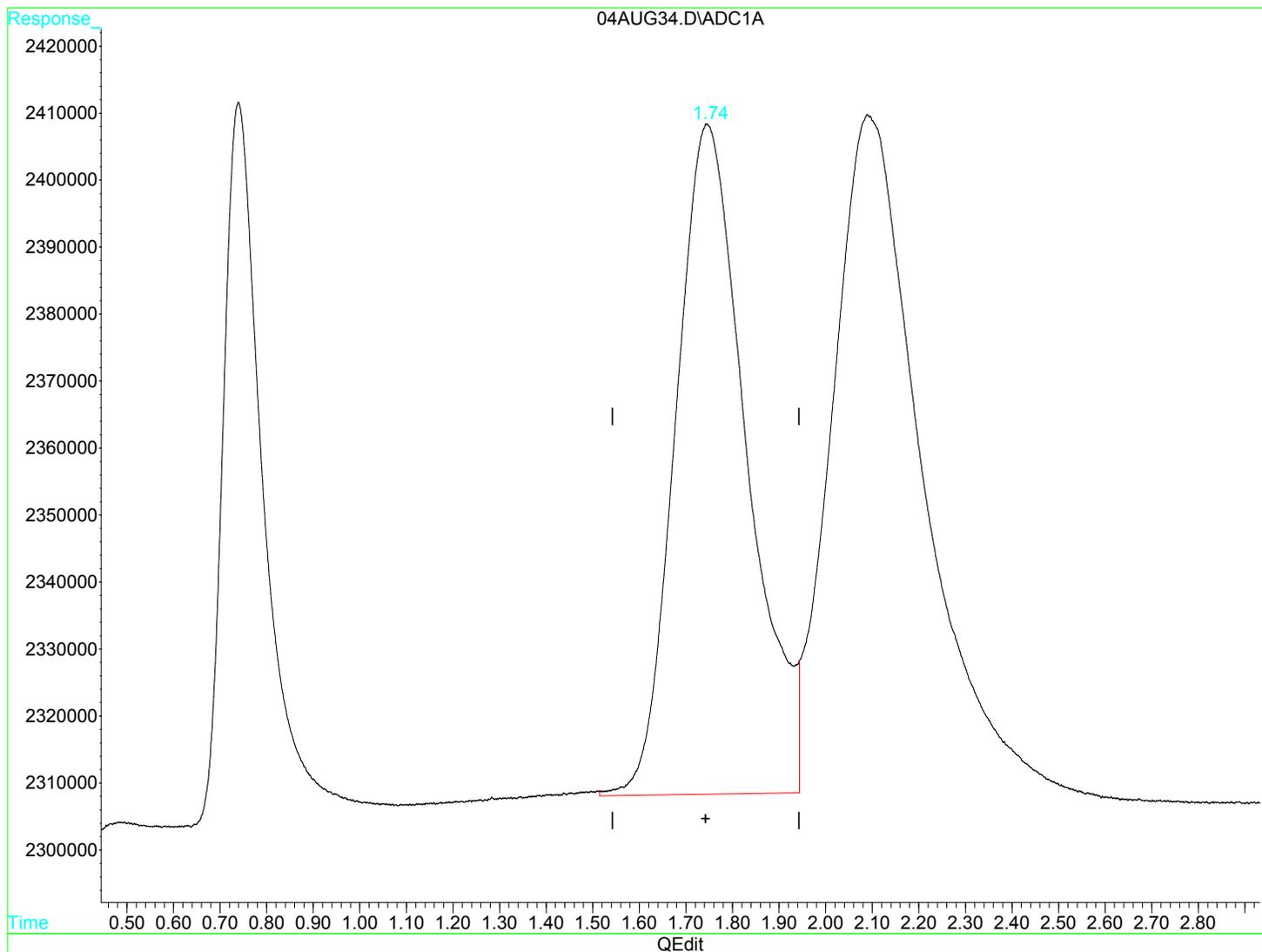


(1) Methane (m)
 0.74min 10.499ug/L m
 response 6354871

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
 Acq On : 4 Aug 2017 12:45 pm Operator: JH2
 Sample : 1713774-CCV4 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

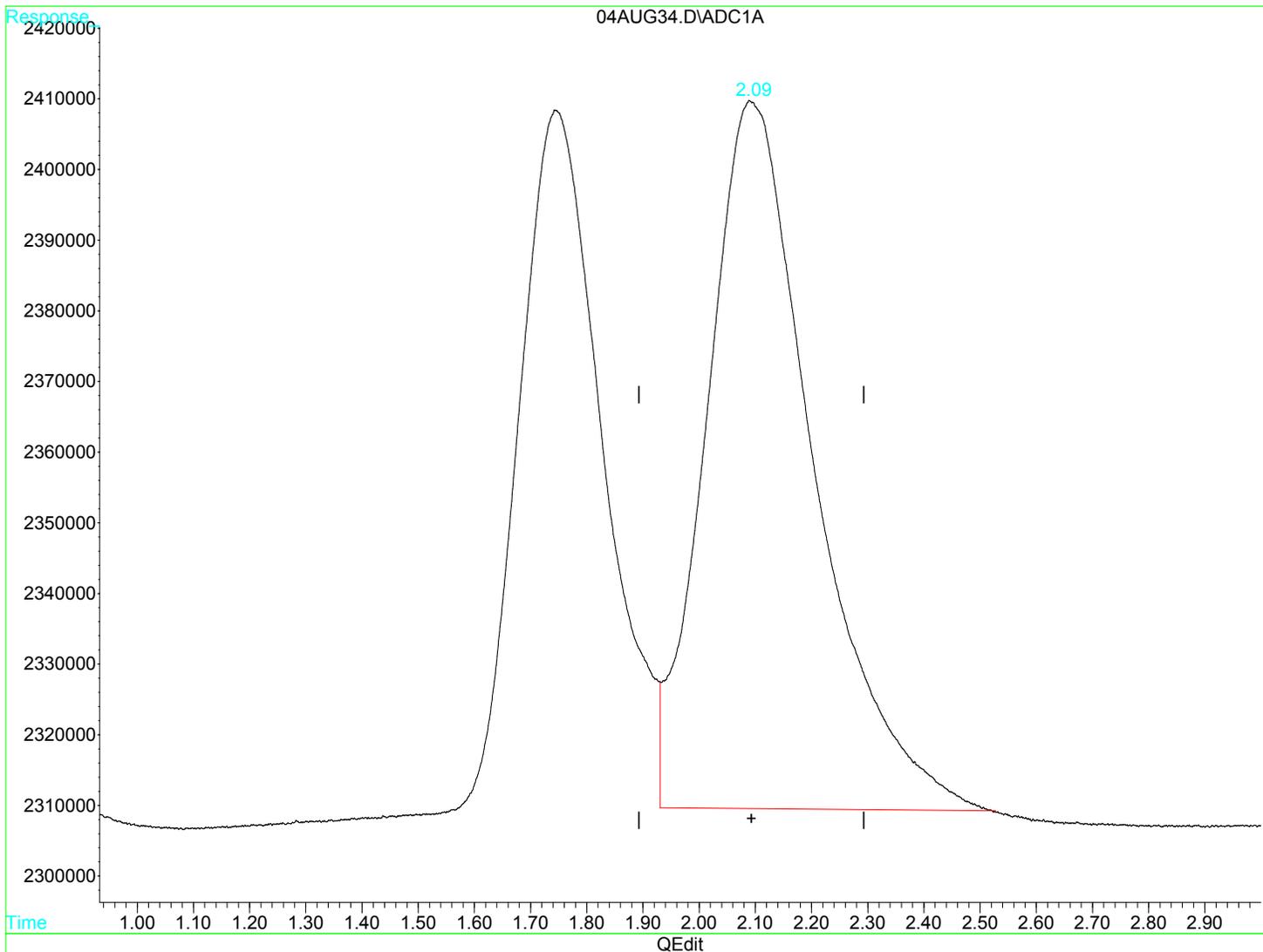


(2) Ethene (m)
 1.74min 26.481ug/L m
 response 10657829

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
 Acq On : 4 Aug 2017 12:45 pm Operator: JH2
 Sample : 1713774-CCV4 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 2.09min 22.929ug/L m
 response 13319616

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
 Acq On : 4 Aug 2017 2:31 pm Operator: JH2
 Sample : 1713774-CCV5 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:19 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

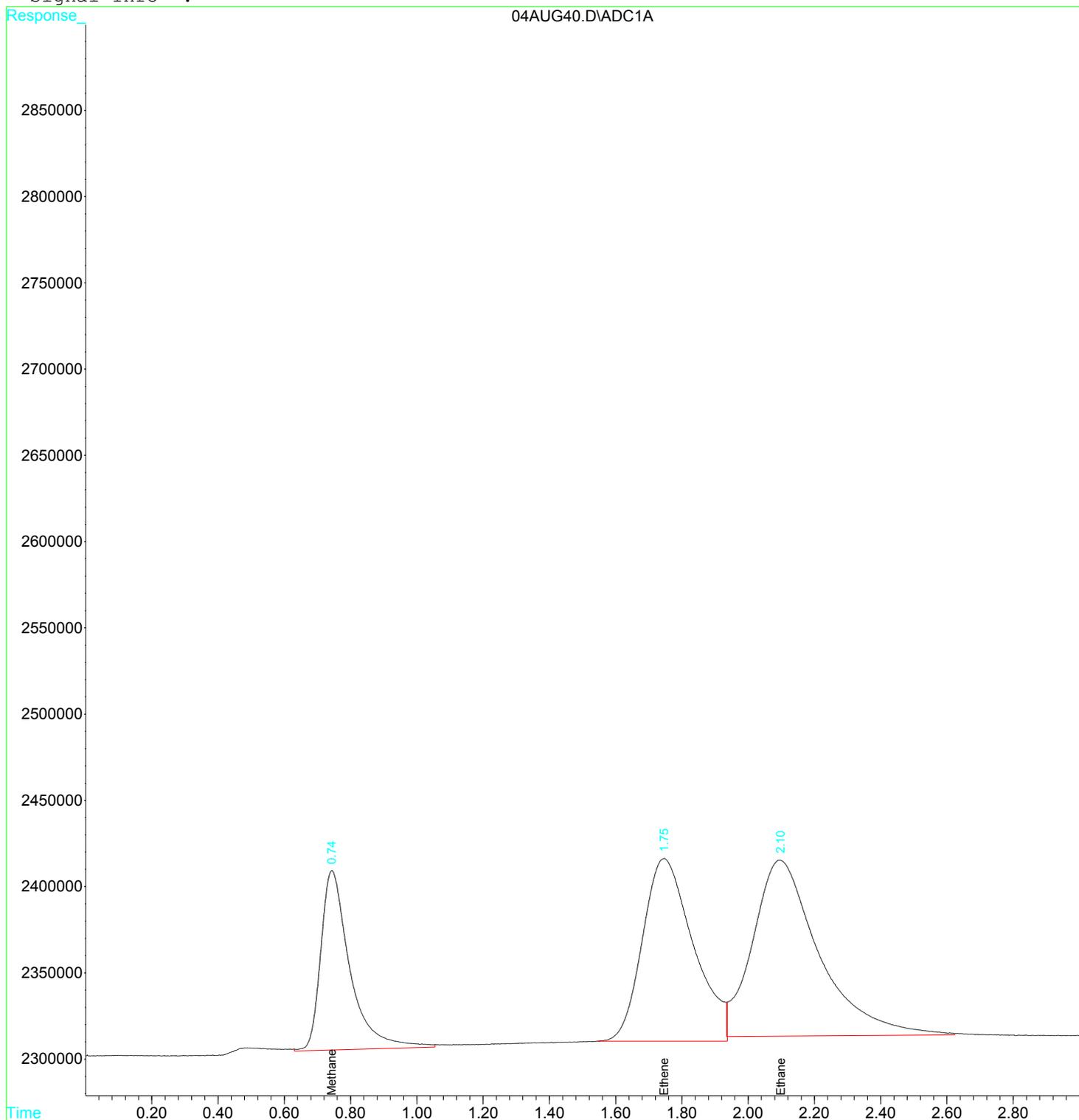
Target Compounds			
1) m Methane	0.74	6361709	10.5101 ug/L m
2) m Ethene	1.75	11306263	28.0917 ug/L m
3) m Ethane	2.10	14203787	24.4508 ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
Acq On : 4 Aug 2017 2:31 pm Operator: JH2
Sample : 1713774-CCV5 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:19 2017 Quant Results File: RSK175.RES

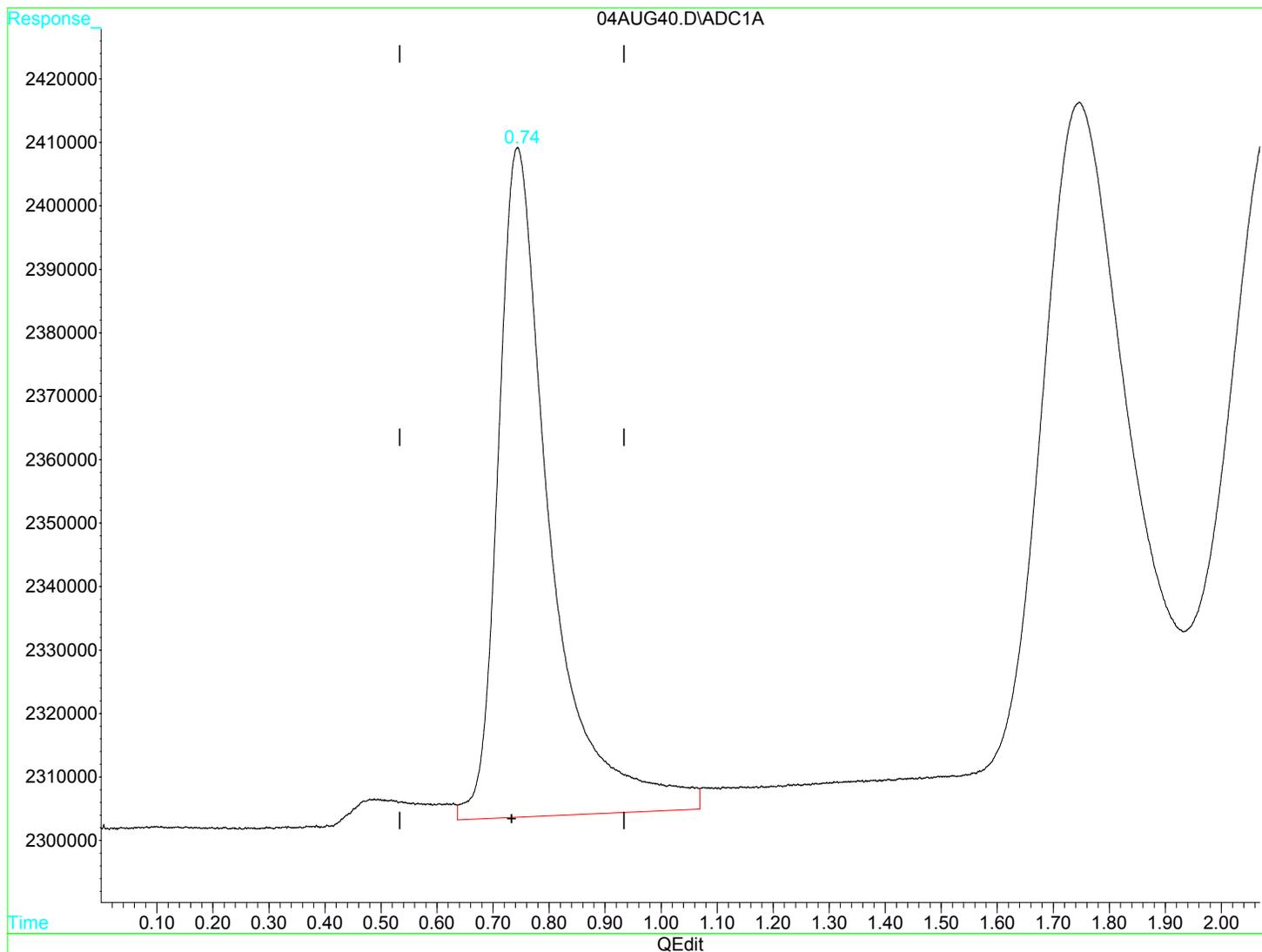
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
 Acq On : 4 Aug 2017 2:31 pm Operator: JH2
 Sample : 1713774-CCV5 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

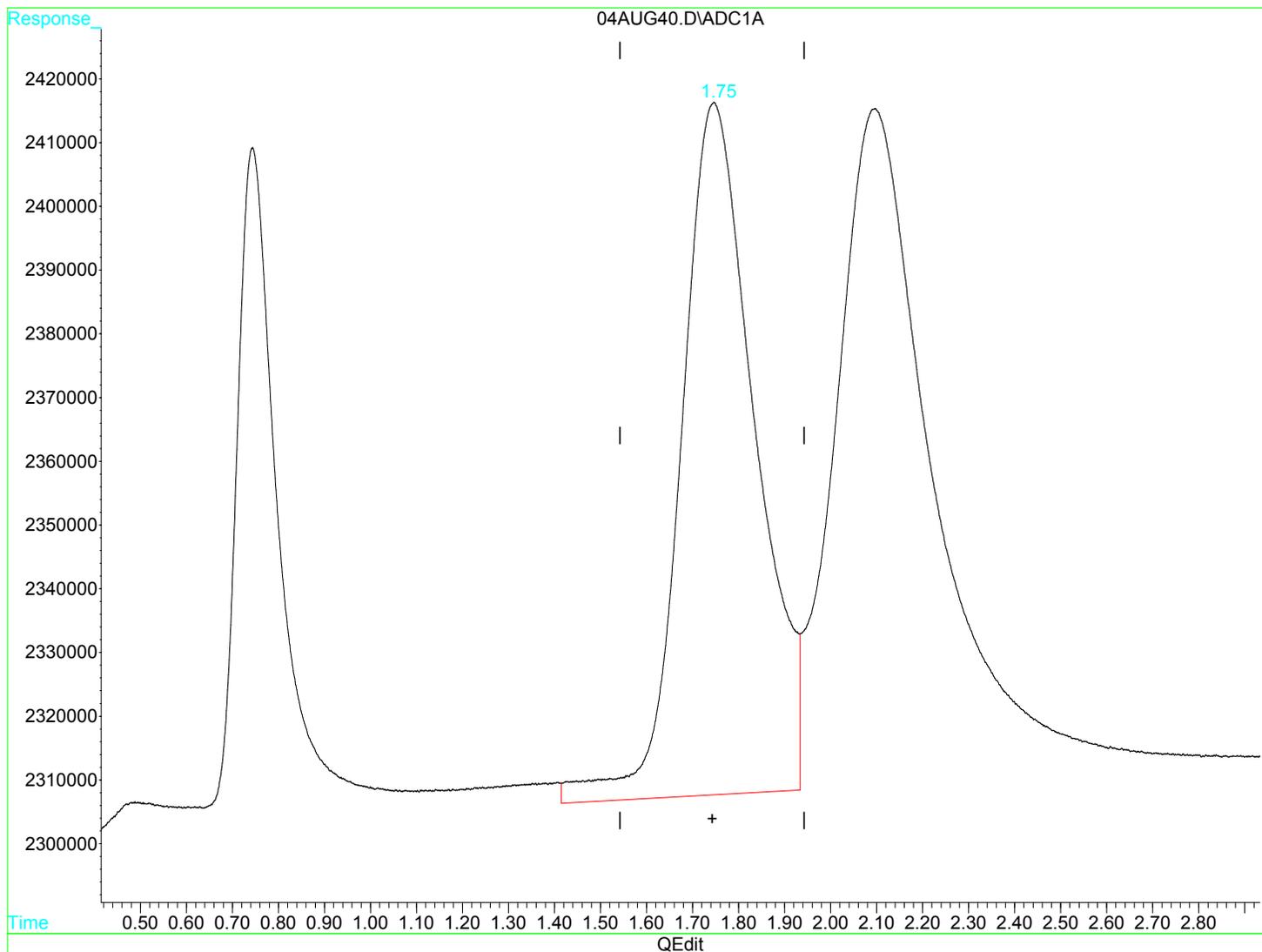


(1) Methane (m)
 0.74min 11.288ug/L
 response 6832438

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
 Acq On : 4 Aug 2017 2:31 pm Operator: JH2
 Sample : 1713774-CCV5 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

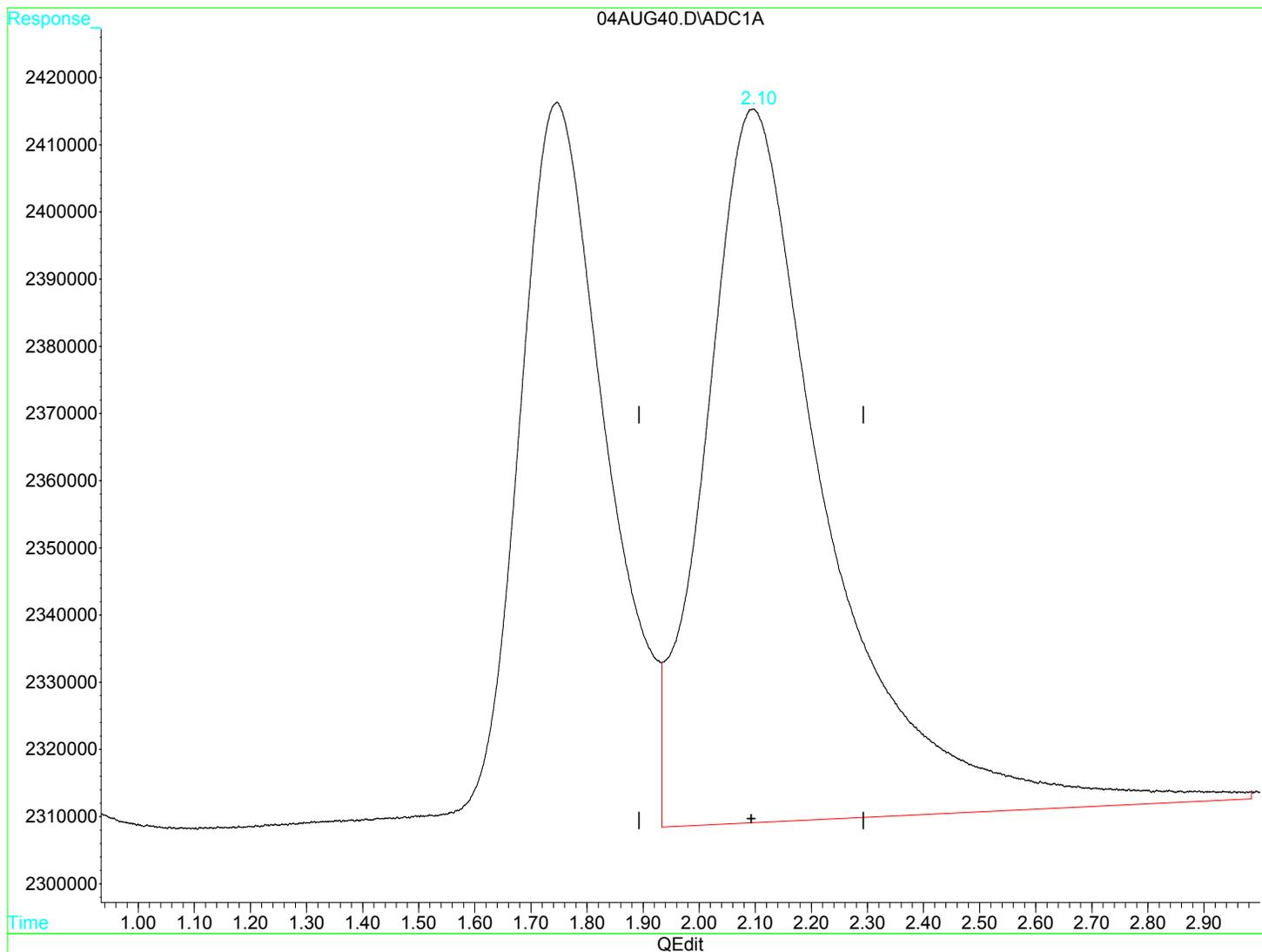


(2) Ethene (m)
 1.75min 30.152ug/L
 response 12135639

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
 Acq On : 4 Aug 2017 2:31 pm Operator: JH2
 Sample : 1713774-CCV5 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)

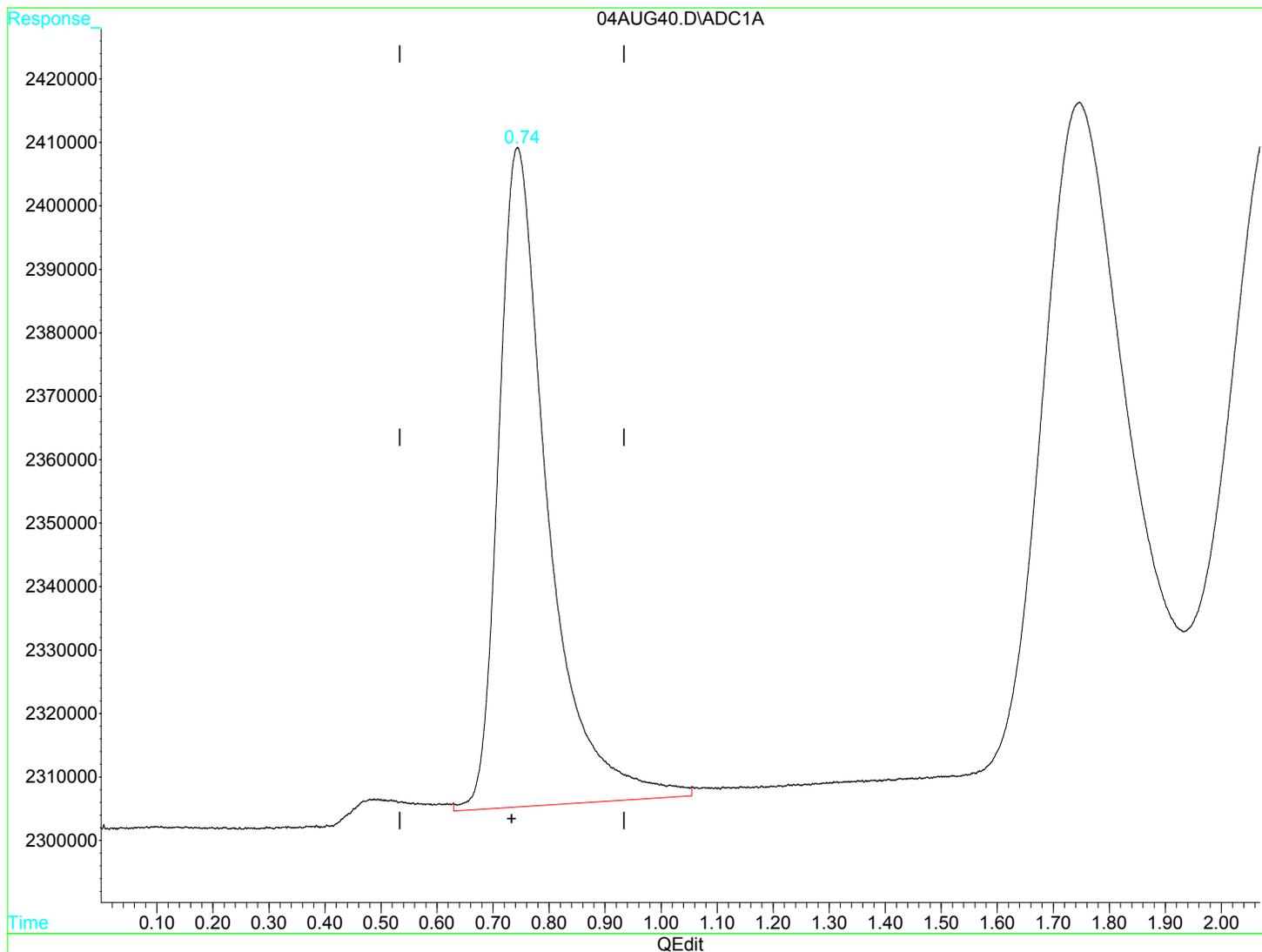
2.10min 27.891ug/L

response 16202387

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
 Acq On : 4 Aug 2017 2:31 pm Operator: JH2
 Sample : 1713774-CCV5 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

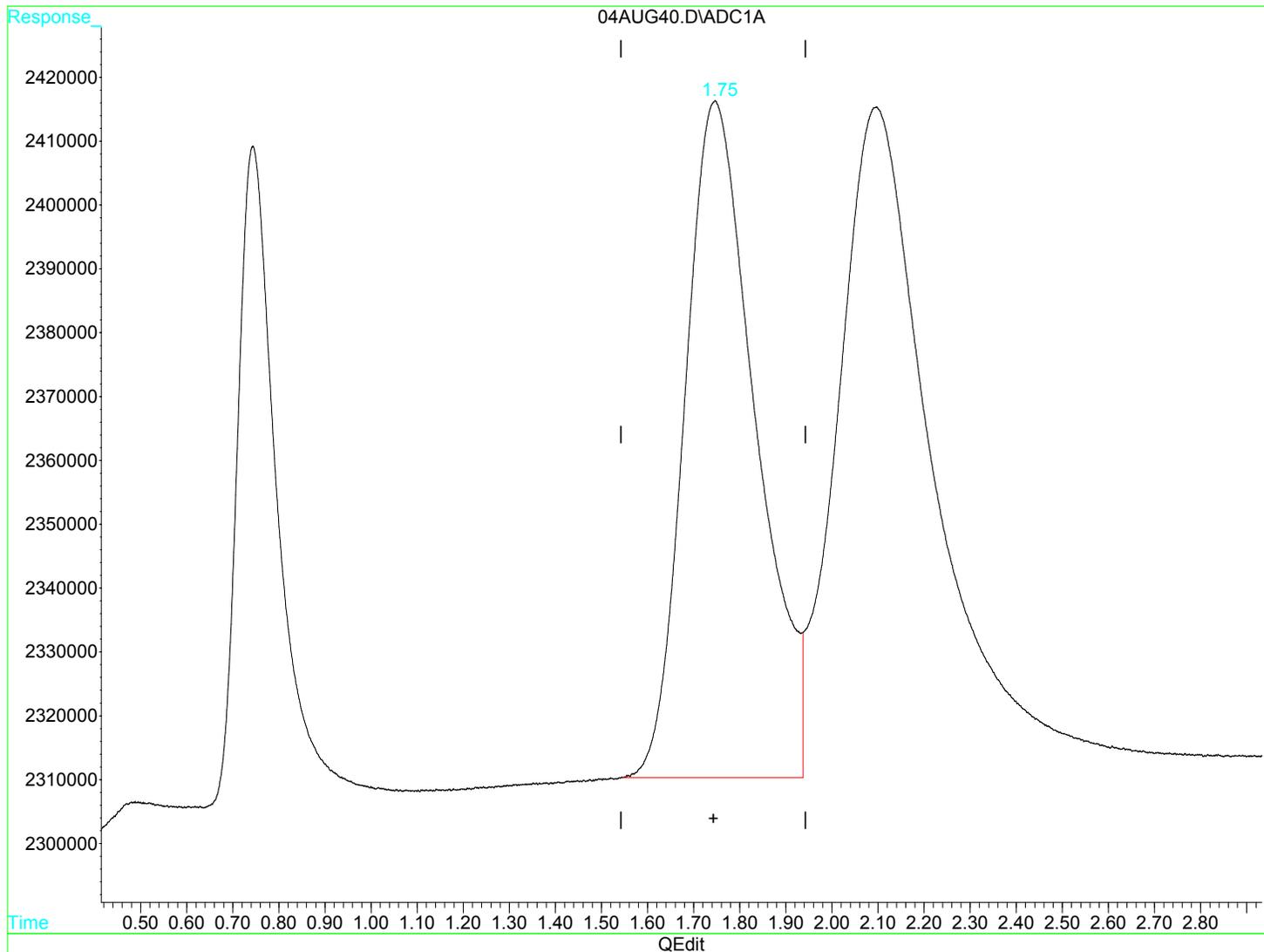


(1) Methane (m)
 0.74min 10.510ug/L m
 response 6361709

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
 Acq On : 4 Aug 2017 2:31 pm Operator: JH2
 Sample : 1713774-CCV5 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

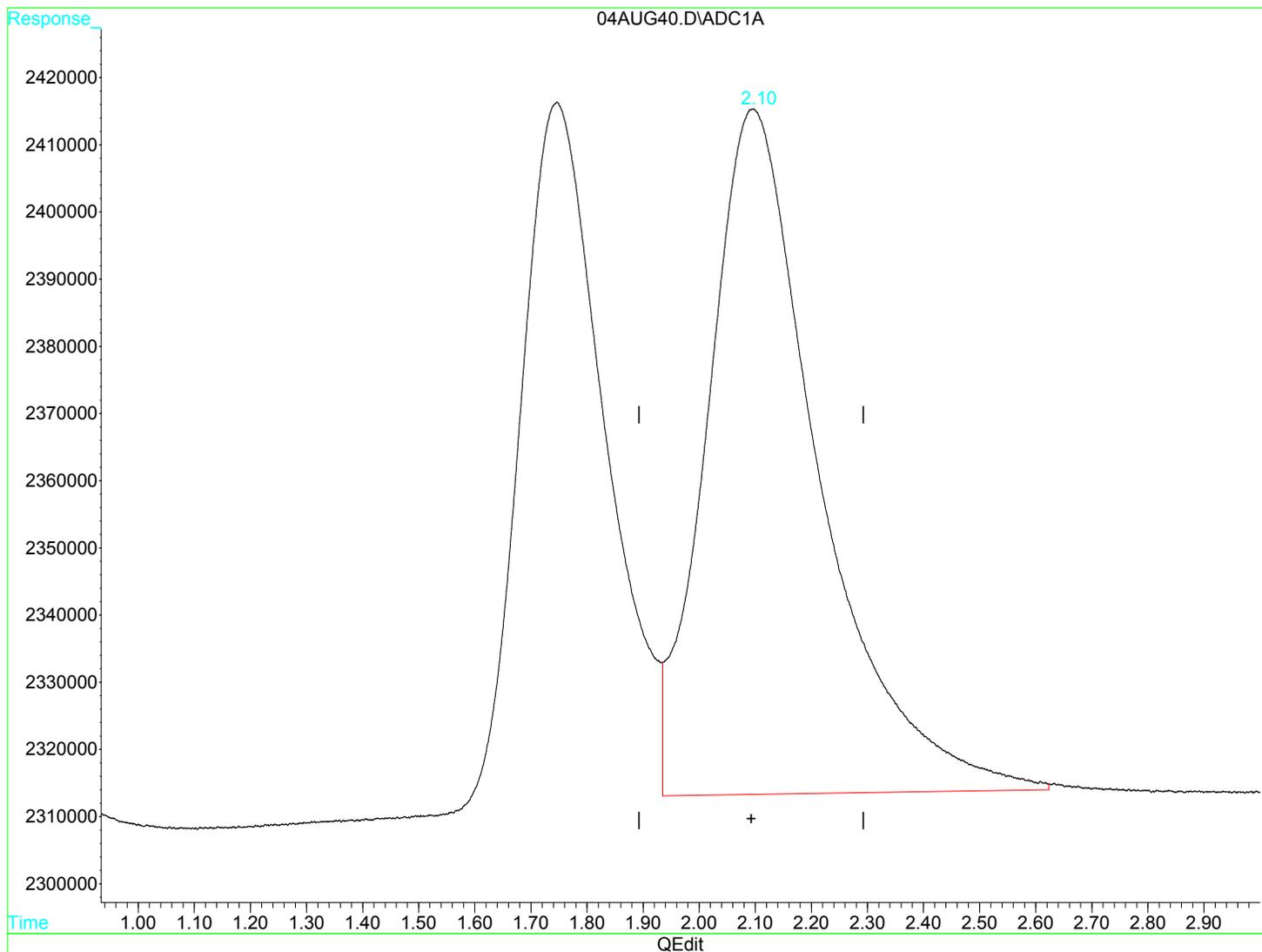


(2) Ethene (m)
 1.75min 28.092ug/L m
 response 11306263

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
 Acq On : 4 Aug 2017 2:31 pm Operator: JH2
 Sample : 1713774-CCV5 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 2.10min 24.451ug/L m
 response 14203787

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG03.D Vial: 3
 Acq On : 8 Aug 2017 8:05 am Operator: JH2
 Sample : 1713976-CCV1 Inst : GC-V1
 Misc : 1 E RSK-175 250uL VO-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:11 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175M.M

Volume Inj. :
 Signal Phase :
 Signal Info :

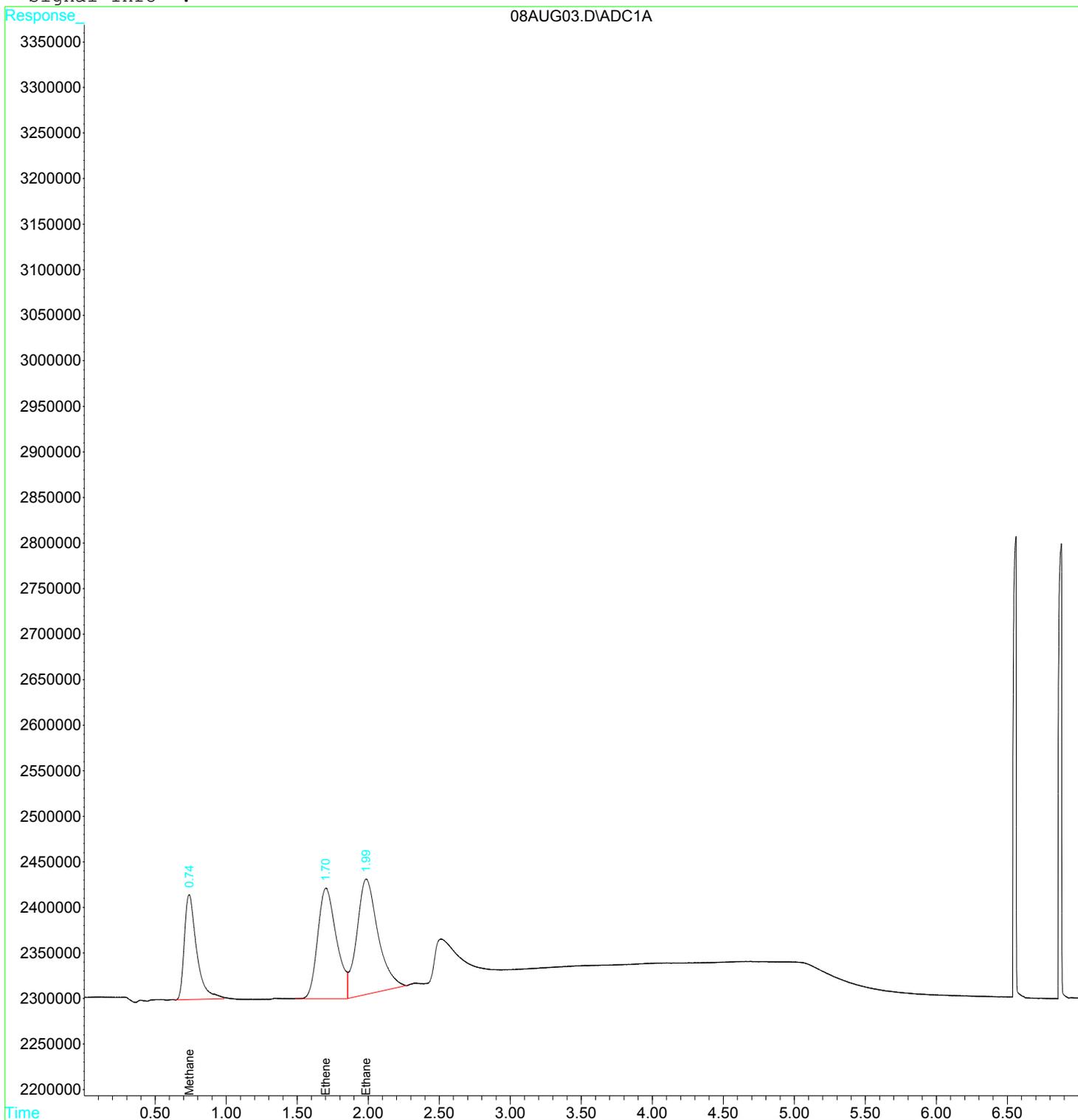
Compound	R.T.	Response	Conc Units

Target Compounds			
1) m Methane	0.74	6937338	11.4611 ug/L m
2) m Ethene	1.70	11220259	27.8780 ug/L
3) m Ethane	1.99f	13187261	22.7010 ug/L m

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG03.D Vial: 3
Acq On : 8 Aug 2017 8:05 am Operator: JH2
Sample : 1713976-CCV1 Inst : GC-V1
Misc : 1 E RSK-175 250uL VO-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 8 16:11 2017 Quant Results File: RSK175.RES

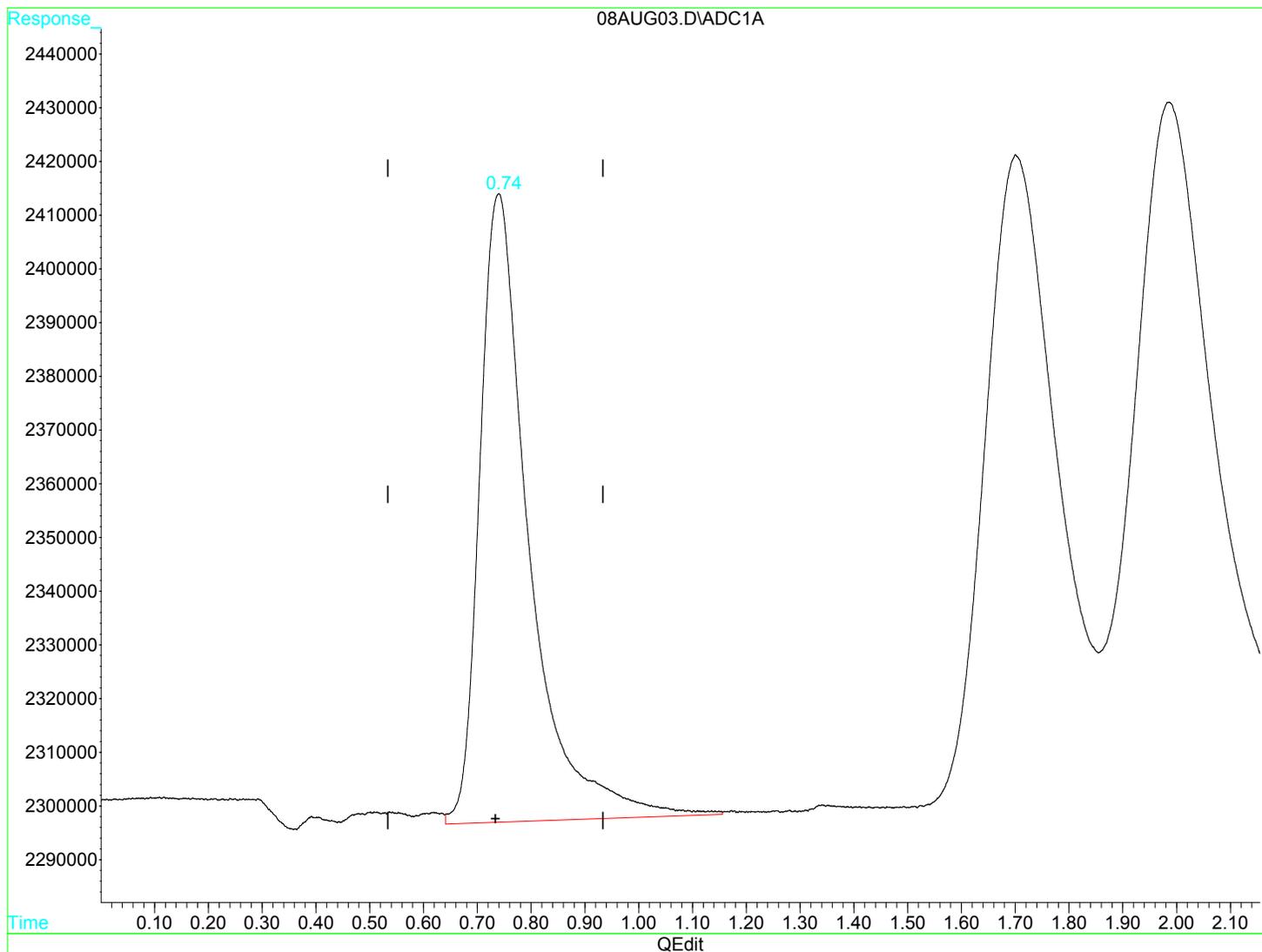
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175M.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG03.D Vial: 3
 Acq On : 8 Aug 2017 8:05 am Operator: JH2
 Sample : 1713976-CCV1 Inst : GC-V1
 Misc : 1 E RSK-175 250uL VO-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:11 2017 Quant Results File: RSK175.RES

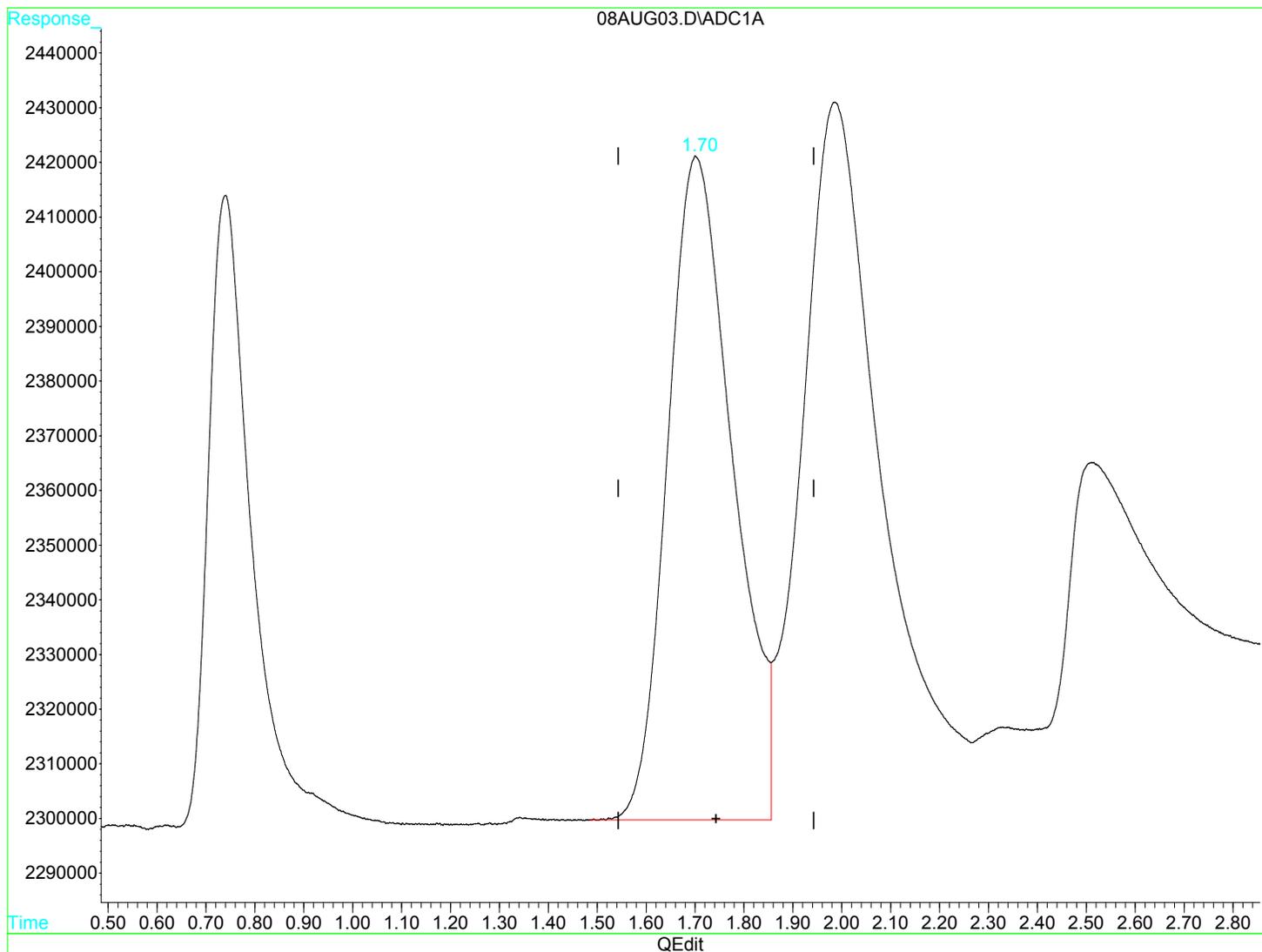
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)
 0.74min 12.298ug/L
 response 7443662

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG03.D Vial: 3
 Acq On : 8 Aug 2017 8:05 am Operator: JH2
 Sample : 1713976-CCV1 Inst : GC-V1
 Misc : 1 E RSK-175 250uL VO-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:11 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

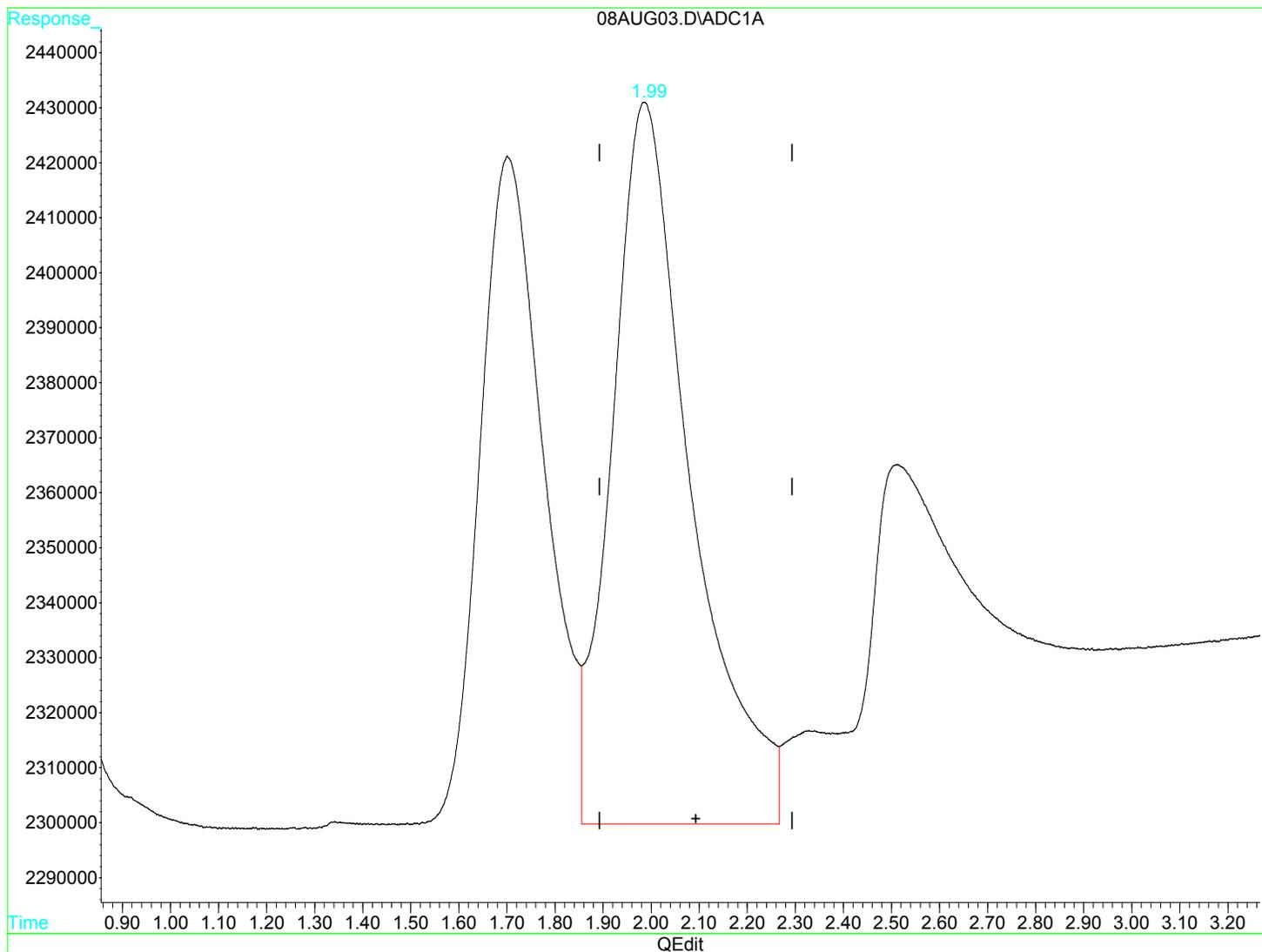


(2) Ethene (m)
 1.70min 27.878ug/L
 response 11220259

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG03.D Vial: 3
 Acq On : 8 Aug 2017 8:05 am Operator: JH2
 Sample : 1713976-CCV1 Inst : GC-V1
 Misc : 1 E RSK-175 250uL VO-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:11 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

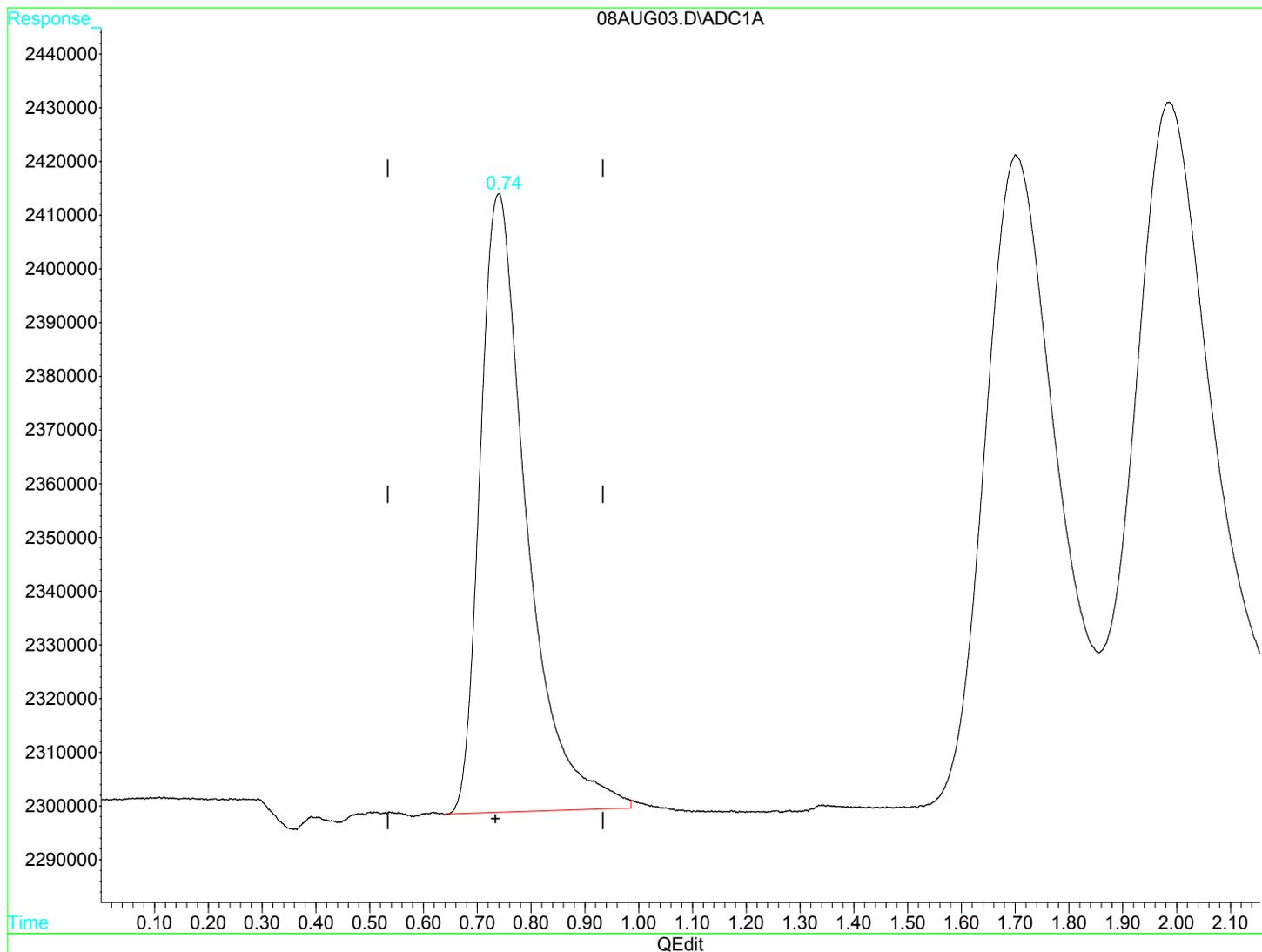


(3) Ethane (m)
 1.99min 25.749ug/L
 response 14958146

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG03.D Vial: 3
 Acq On : 8 Aug 2017 8:05 am Operator: JH2
 Sample : 1713976-CCV1 Inst : GC-V1
 Misc : 1 E RSK-175 250uL VO-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:11 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

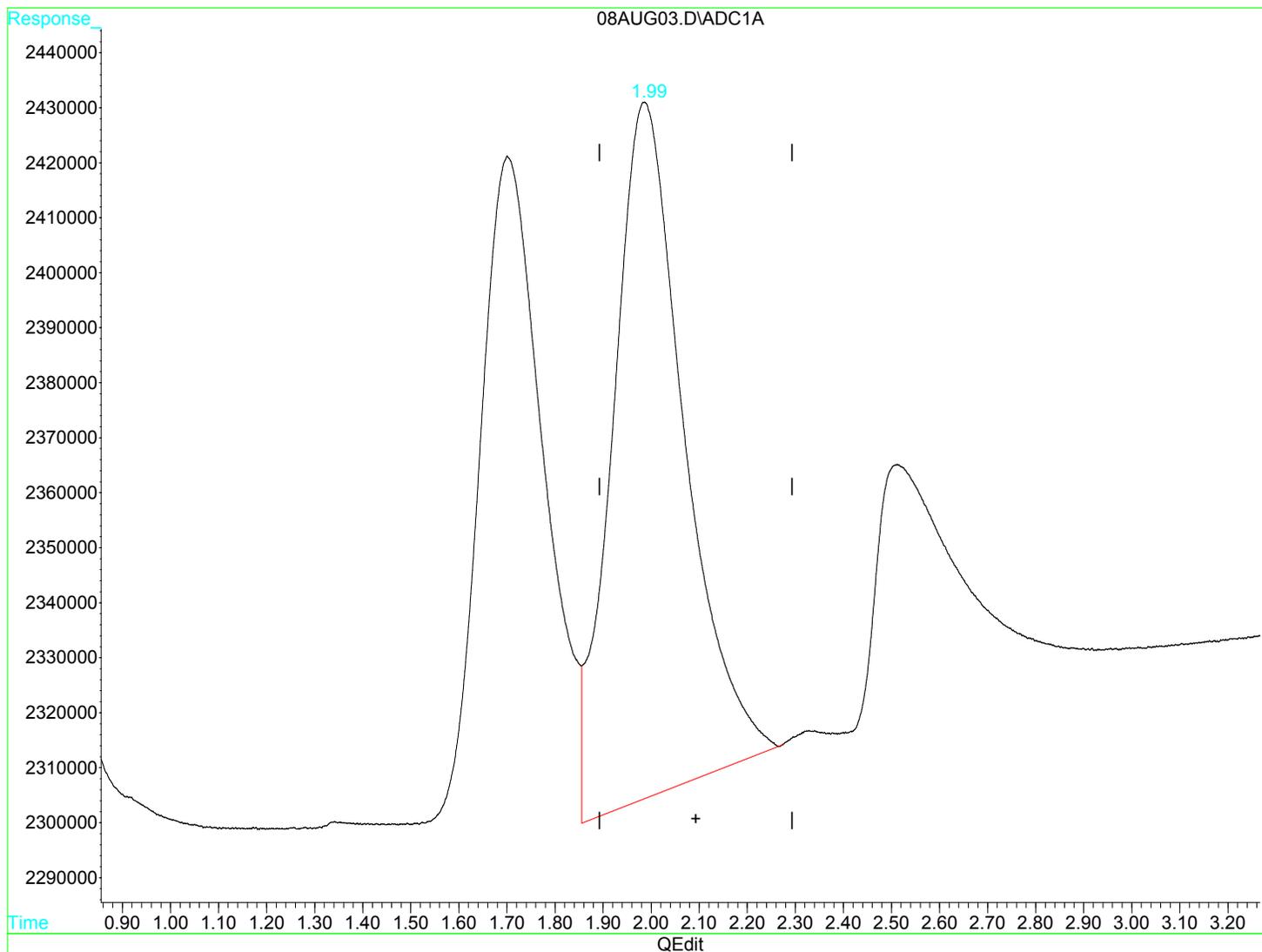


(1) Methane (m)
 0.74min 11.461ug/L m
 response 6937338

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG03.D Vial: 3
 Acq On : 8 Aug 2017 8:05 am Operator: JH2
 Sample : 1713976-CCV1 Inst : GC-V1
 Misc : 1 E RSK-175 250uL VO-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:11 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 1.99min 22.701ug/L m
 response 13187261

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG11.D Vial: 11
 Acq On : 8 Aug 2017 12:41 pm Operator: JH2
 Sample : 1713976-CCV2 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:15 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175M.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

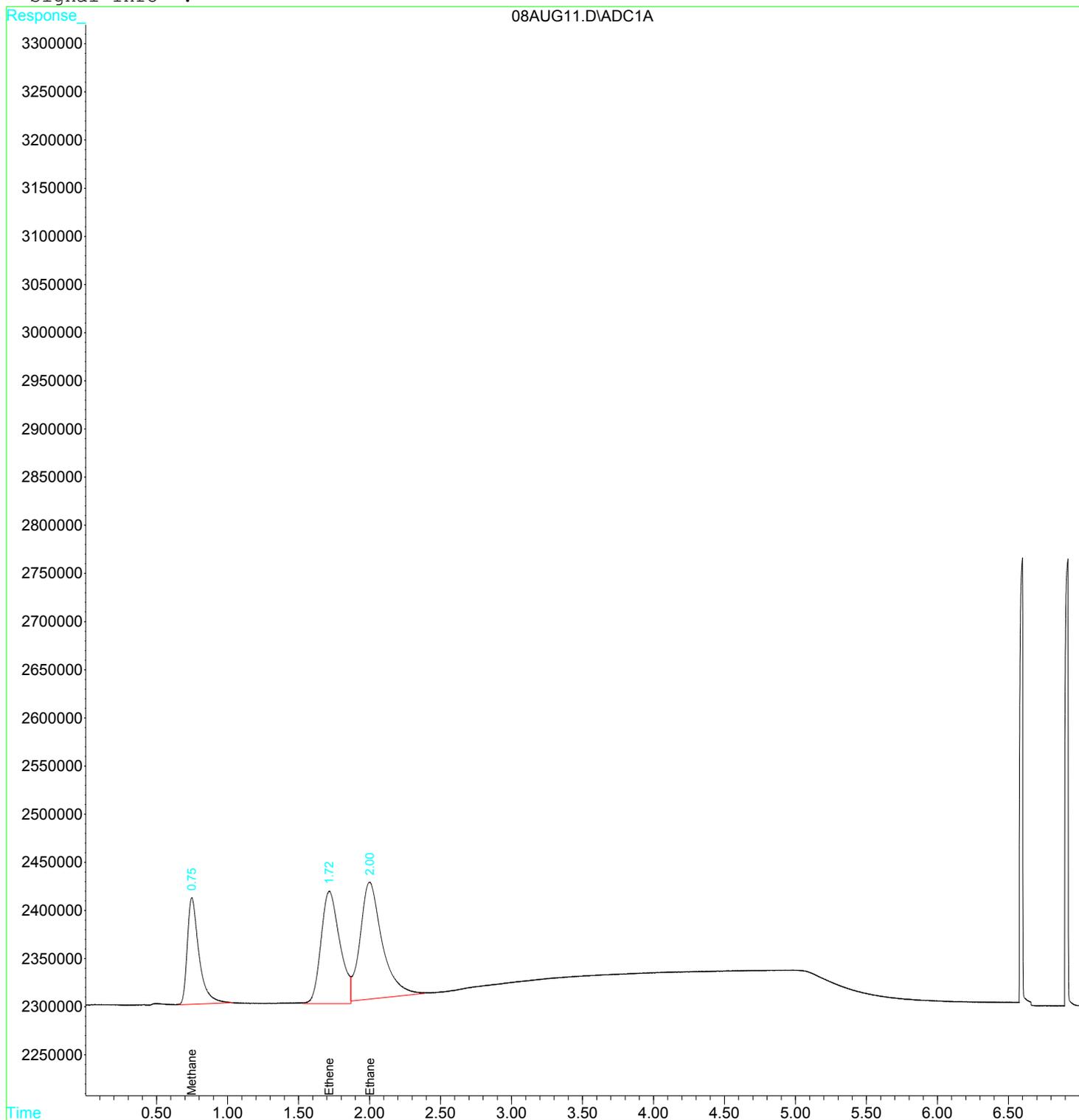
Target Compounds			
1) m Methane	0.75	6309799	10.4244 ug/L m
2) m Ethene	1.72	10863843	26.9924 ug/L m
3) m Ethane	2.00	13099154	22.5493 ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG11.D Vial: 11
Acq On : 8 Aug 2017 12:41 pm Operator: JH2
Sample : 1713976-CCV2 Inst : GC-V1
Misc : 1 He RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 8 16:15 2017 Quant Results File: RSK175.RES

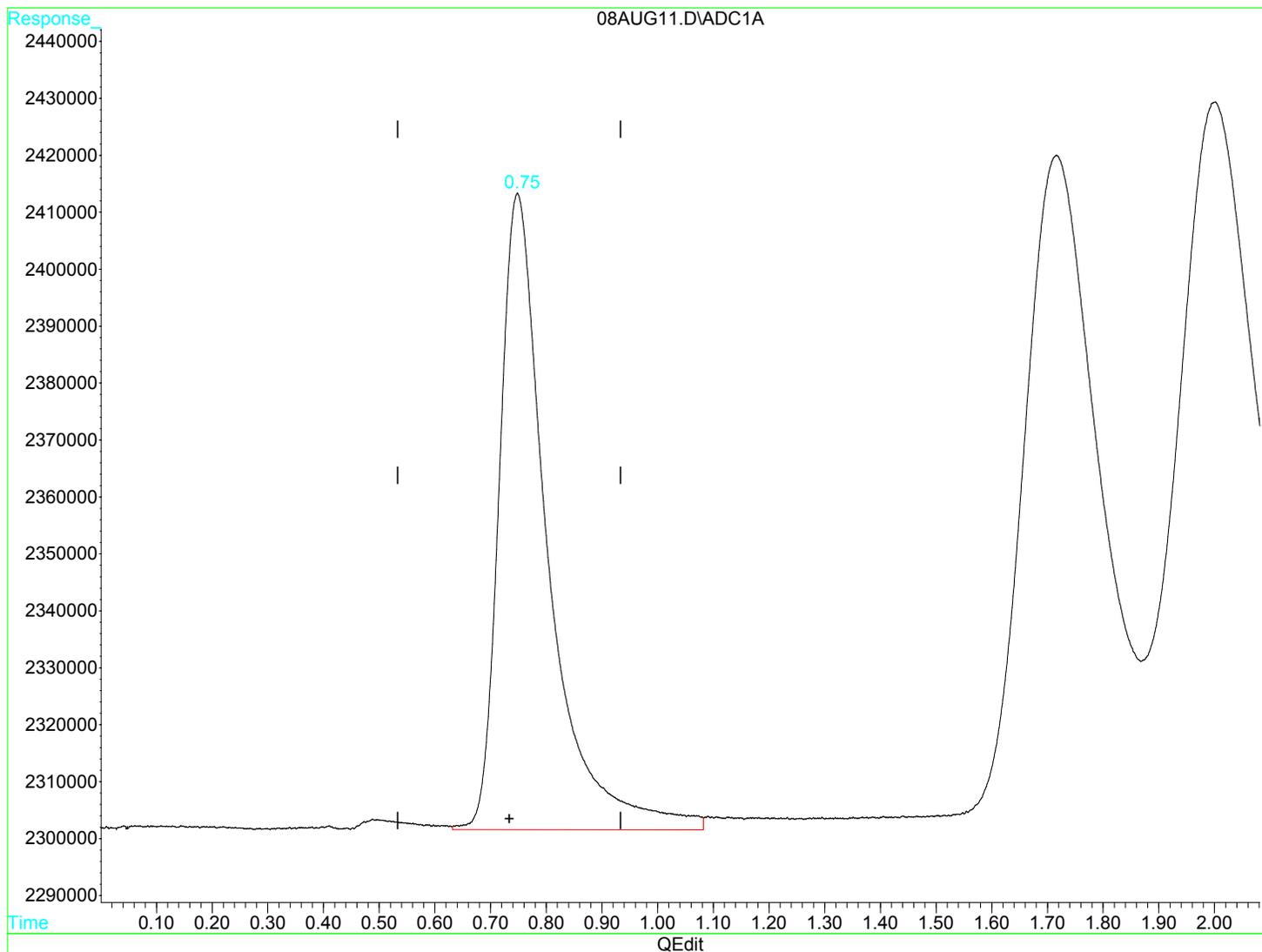
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175M.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG11.D Vial: 11
 Acq On : 8 Aug 2017 12:41 pm Operator: JH2
 Sample : 1713976-CCV2 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

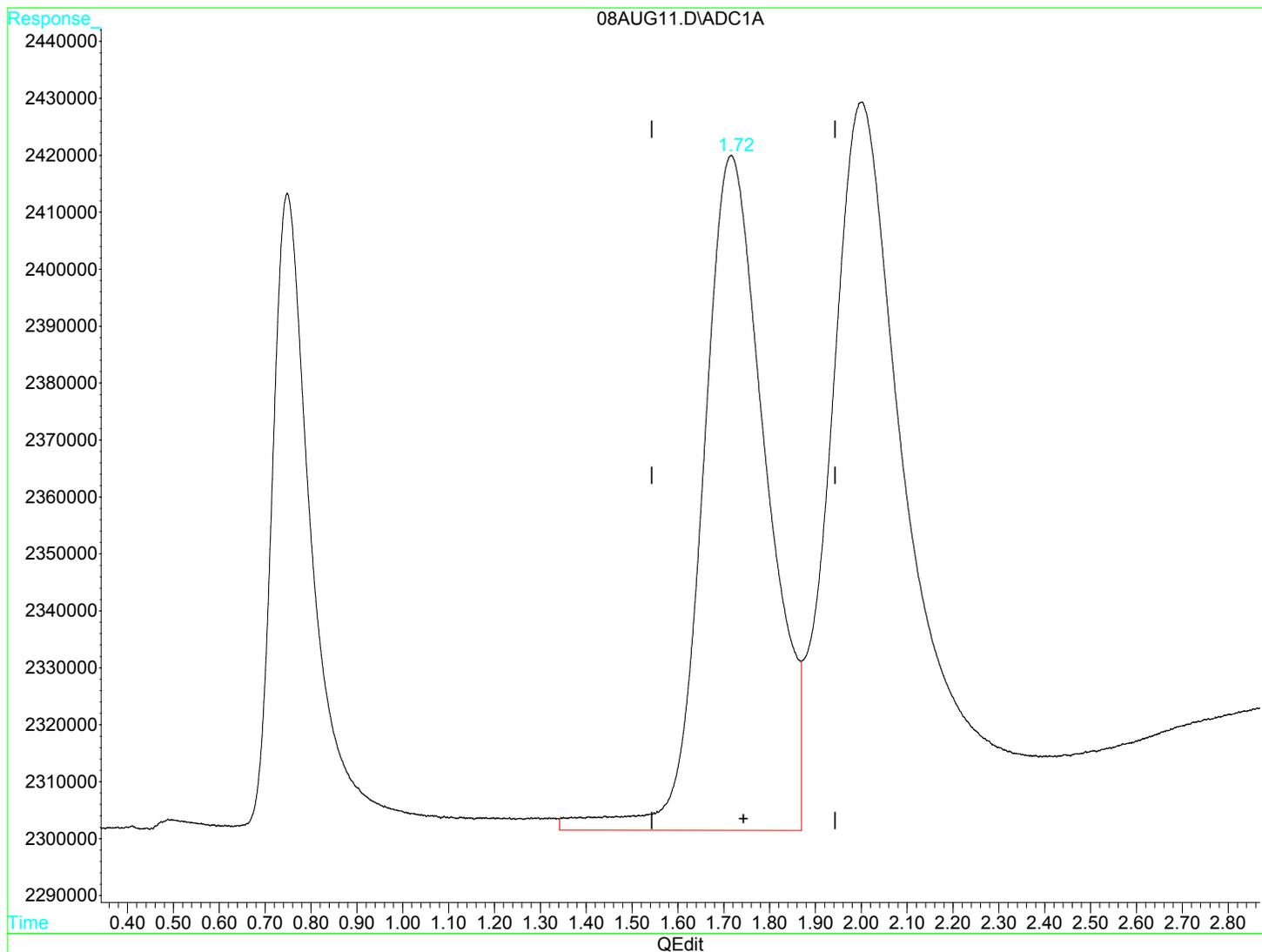


(1) Methane (m)
 0.75min 11.182ug/L
 response 6768662

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG11.D Vial: 11
 Acq On : 8 Aug 2017 12:41 pm Operator: JH2
 Sample : 1713976-CCV2 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

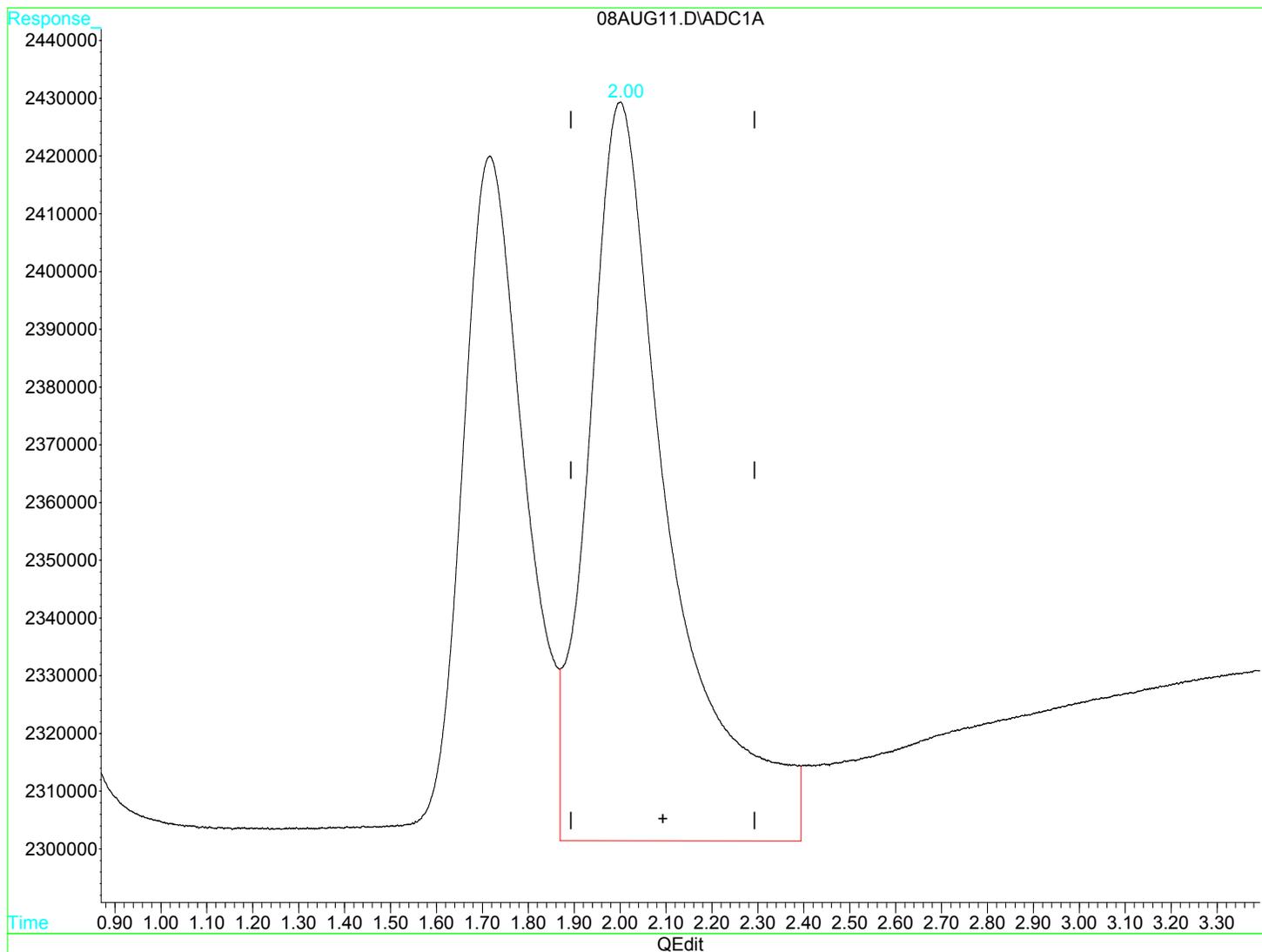


(2) Ethene (m)
 1.72min 28.468ug/L
 response 11457801

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG11.D Vial: 11
 Acq On : 8 Aug 2017 12:41 pm Operator: JH2
 Sample : 1713976-CCV2 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

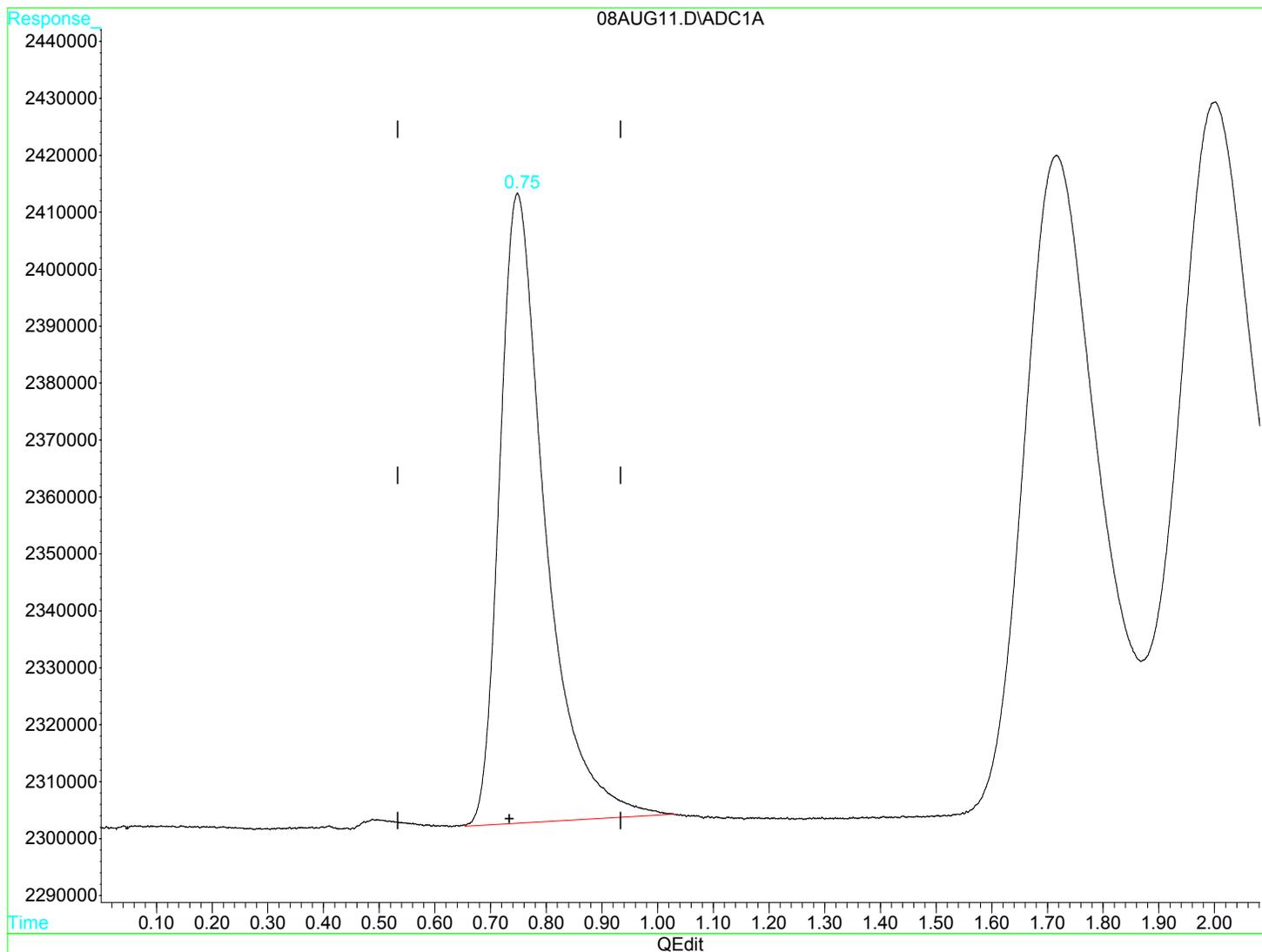


(3) Ethane (m)
 2.00min 27.170ug/L
 response 15783586

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG11.D Vial: 11
 Acq On : 8 Aug 2017 12:41 pm Operator: JH2
 Sample : 1713976-CCV2 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

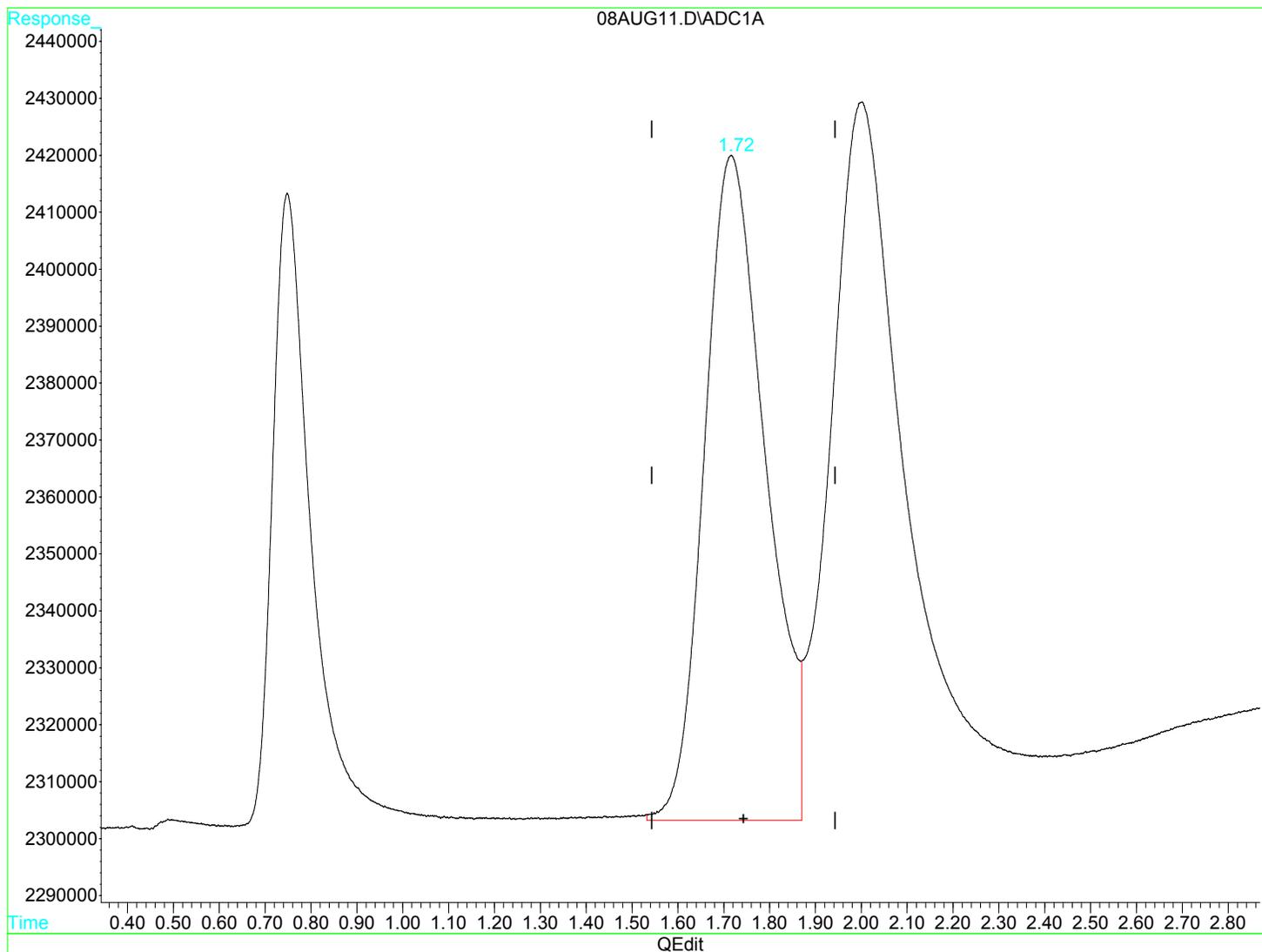


(1) Methane (m)
 0.75min 10.424ug/L m
 response 6309799

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG11.D Vial: 11
 Acq On : 8 Aug 2017 12:41 pm Operator: JH2
 Sample : 1713976-CCV2 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

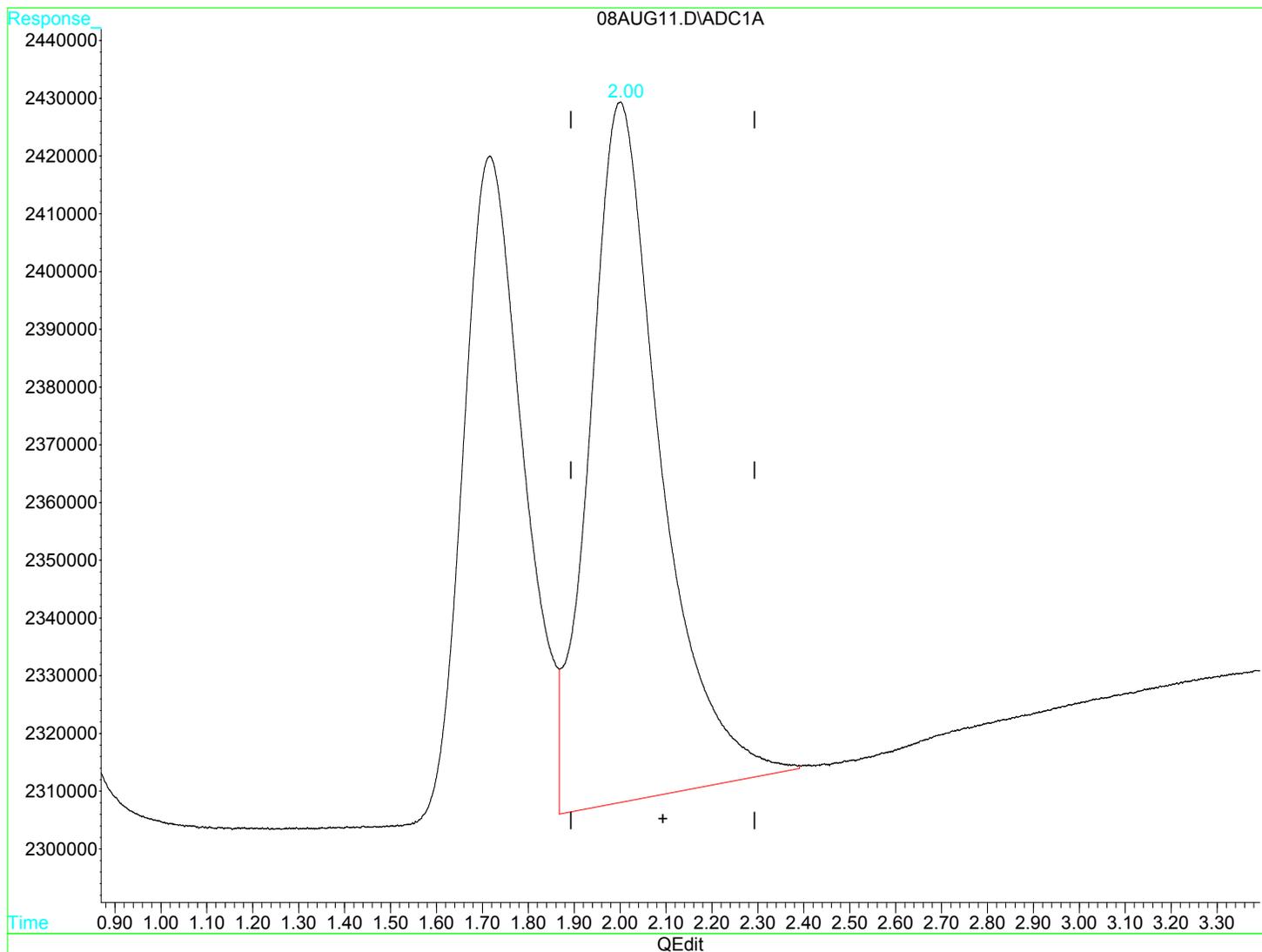


(2) Ethene (m)
 1.72min 26.992ug/L m
 response 10863843

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG11.D Vial: 11
 Acq On : 8 Aug 2017 12:41 pm Operator: JH2
 Sample : 1713976-CCV2 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 2.00min 22.549ug/L m
 response 13099154

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG19.D Vial: 19
 Acq On : 8 Aug 2017 3:19 pm Operator: JH2
 Sample : 1713976-CCV3 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 9 5:49 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175M.M

Volume Inj. :
 Signal Phase :
 Signal Info :

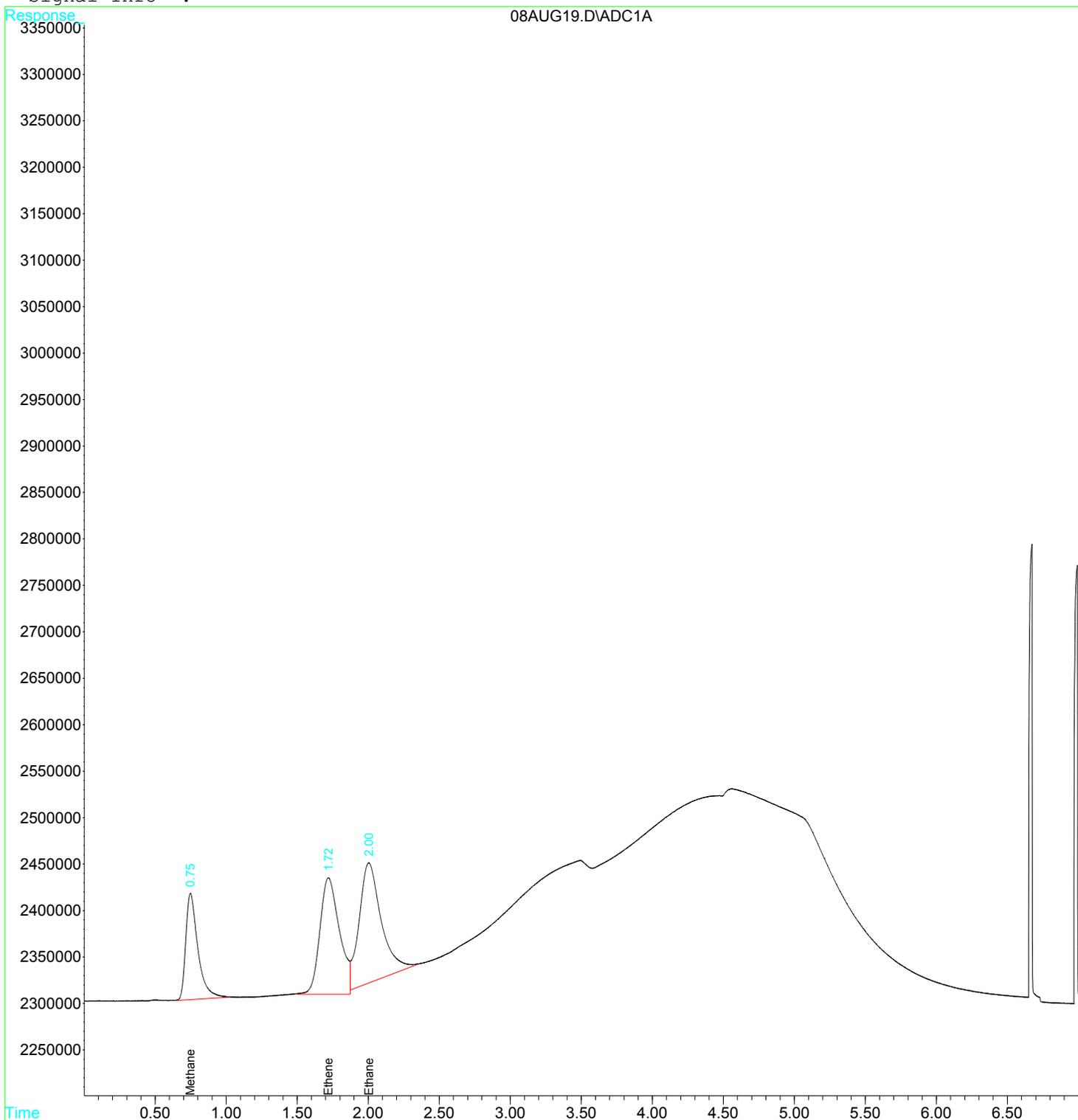
Compound	R.T.	Response	Conc Units

Target Compounds			
1) m Methane	0.75	6807642	11.2469 ug/L m
2) m Ethene	1.72	12065096	29.9771 ug/L m
3) m Ethane	2.00	13967414	24.0439 ug/L m

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG19.D Vial: 19
Acq On : 8 Aug 2017 3:19 pm Operator: JH2
Sample : 1713976-CCV3 Inst : GC-V1
Misc : 1 He RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 9 5:49 2017 Quant Results File: RSK175.RES

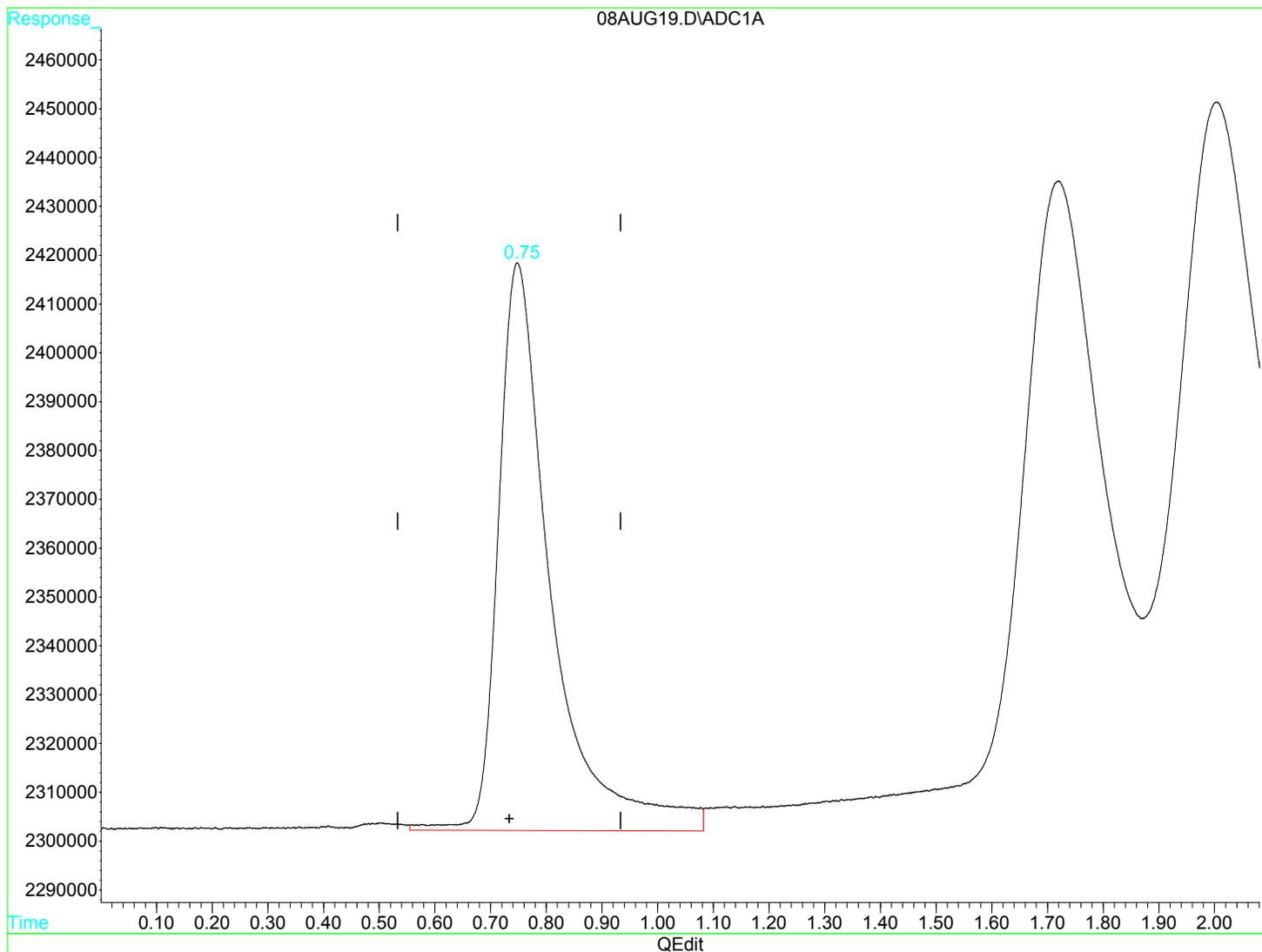
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175M.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG19.D Vial: 19
 Acq On : 8 Aug 2017 3:19 pm Operator: JH2
 Sample : 1713976-CCV3 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 9 5:49 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

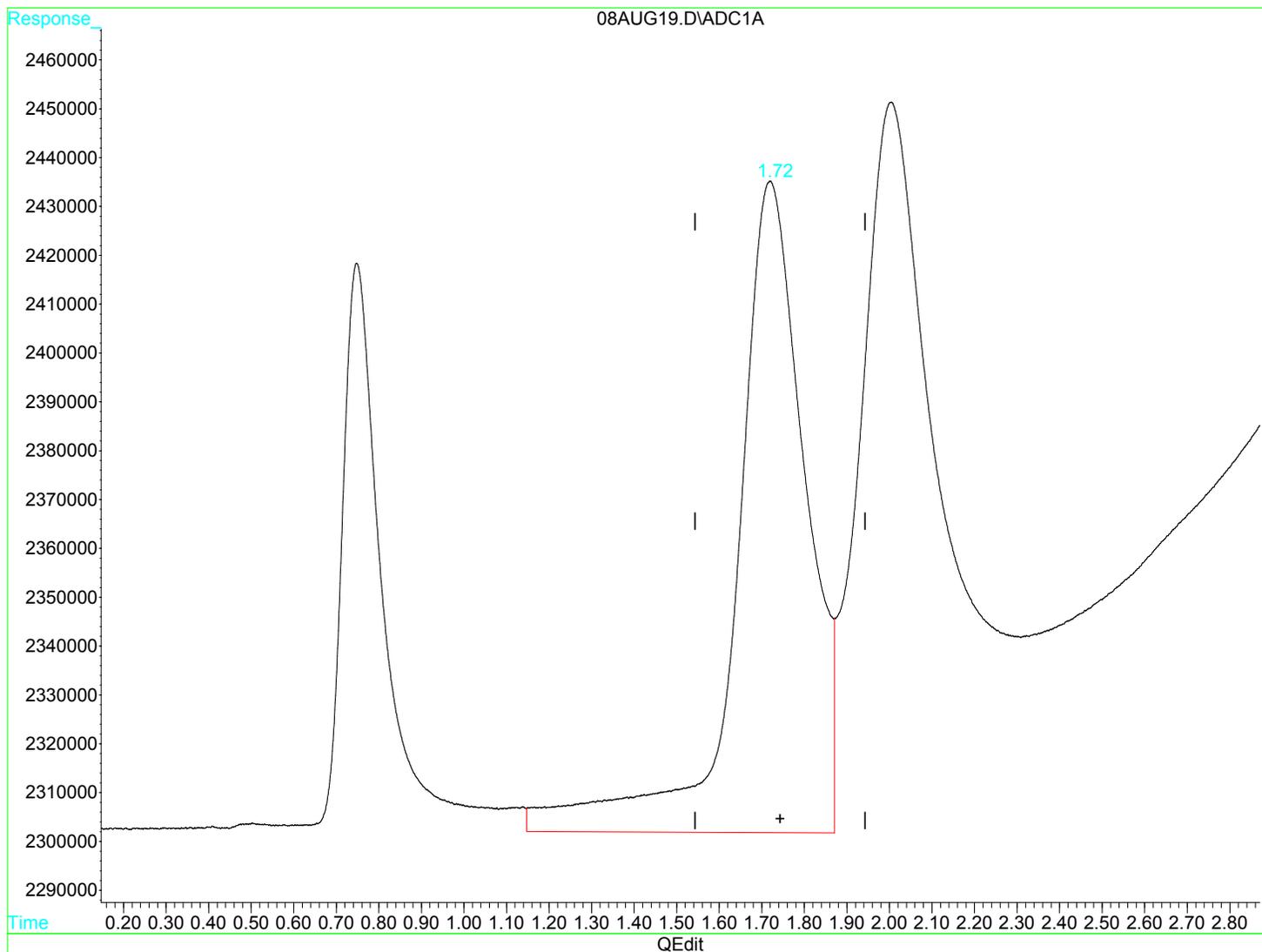


(1) Methane (m)
 0.75min 12.644ug/L
 response 7653058

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG19.D Vial: 19
 Acq On : 8 Aug 2017 3:19 pm Operator: JH2
 Sample : 1713976-CCV3 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 9 5:49 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

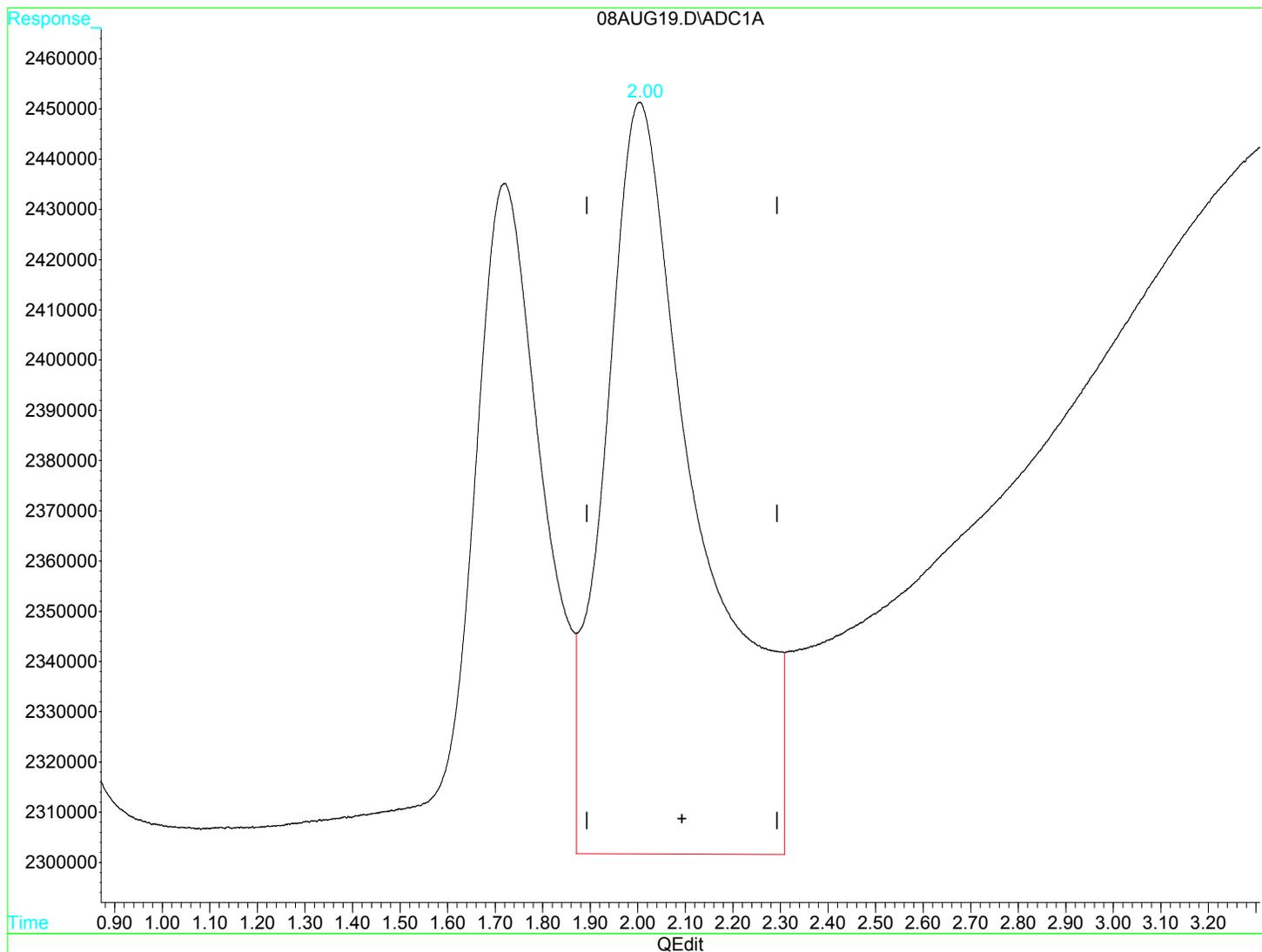


(2) Ethene (m)
 1.72min 37.633ug/L
 response 15146264

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG19.D Vial: 19
 Acq On : 8 Aug 2017 3:19 pm Operator: JH2
 Sample : 1713976-CCV3 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 9 5:49 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)

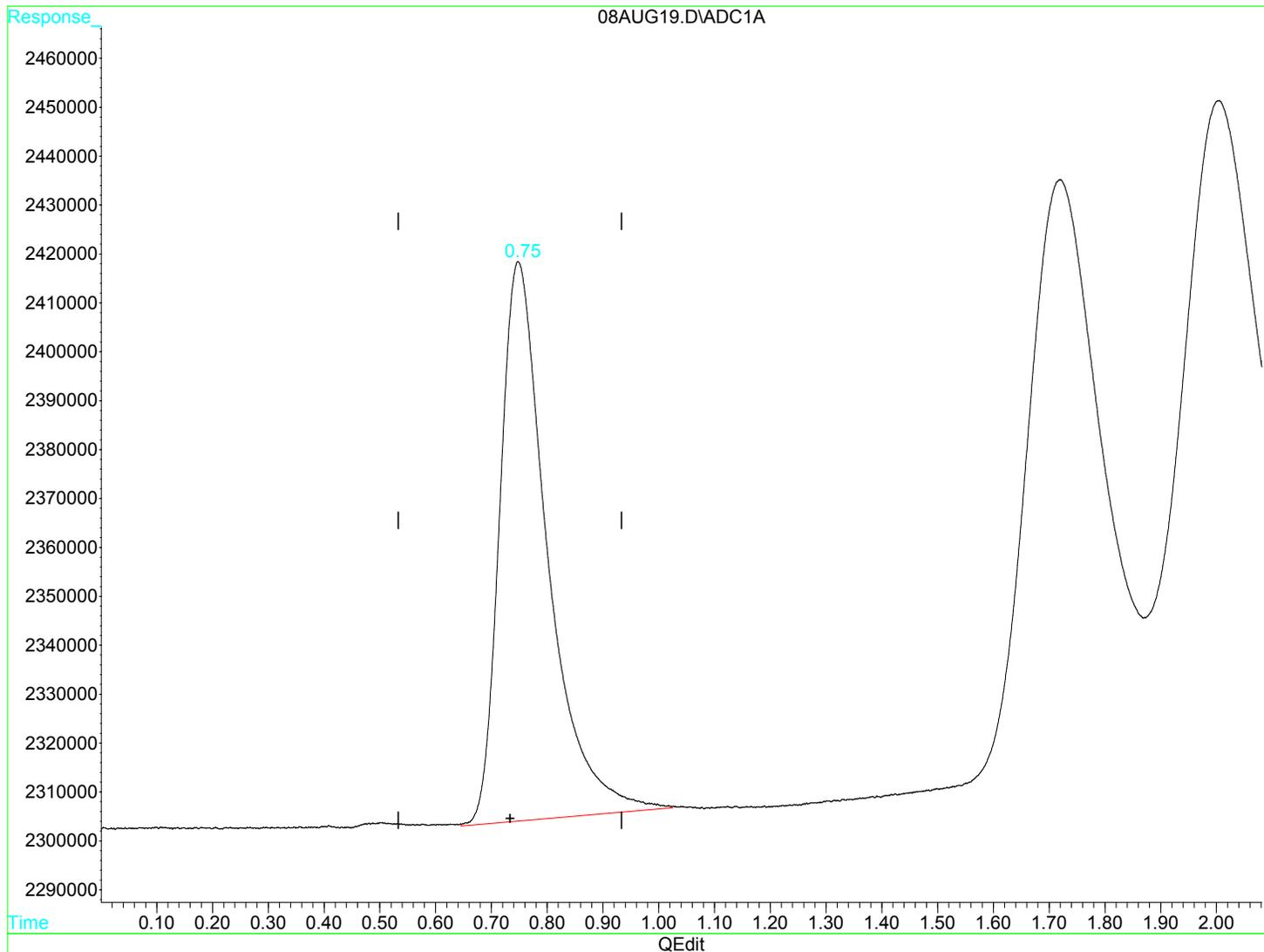
2.00min 35.577ug/L

response 20667193

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG19.D Vial: 19
 Acq On : 8 Aug 2017 3:19 pm Operator: JH2
 Sample : 1713976-CCV3 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 9 5:49 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

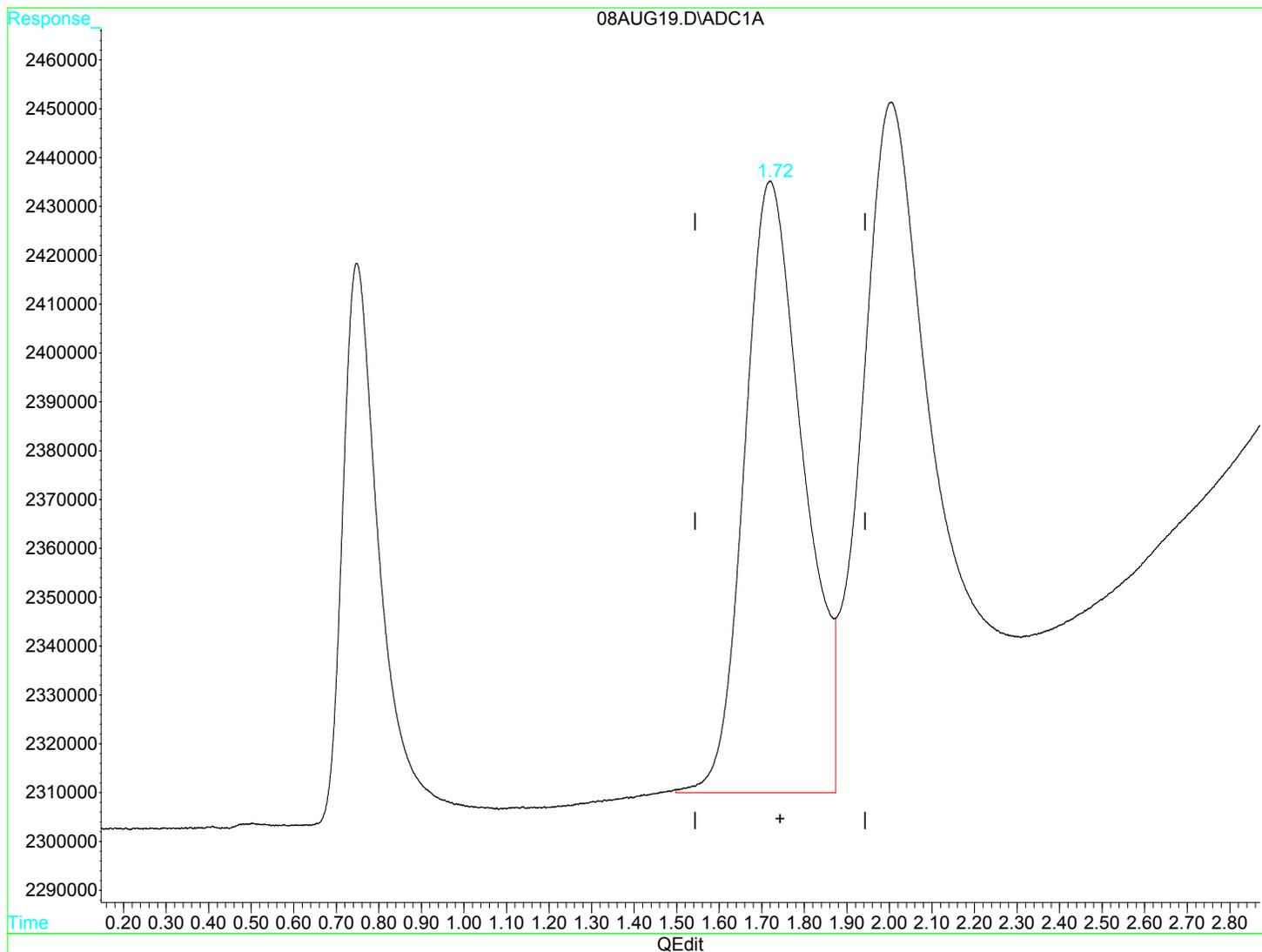


(1) Methane (m)
 0.75min 11.247ug/L m
 response 6807642

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG19.D Vial: 19
 Acq On : 8 Aug 2017 3:19 pm Operator: JH2
 Sample : 1713976-CCV3 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 9 5:49 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

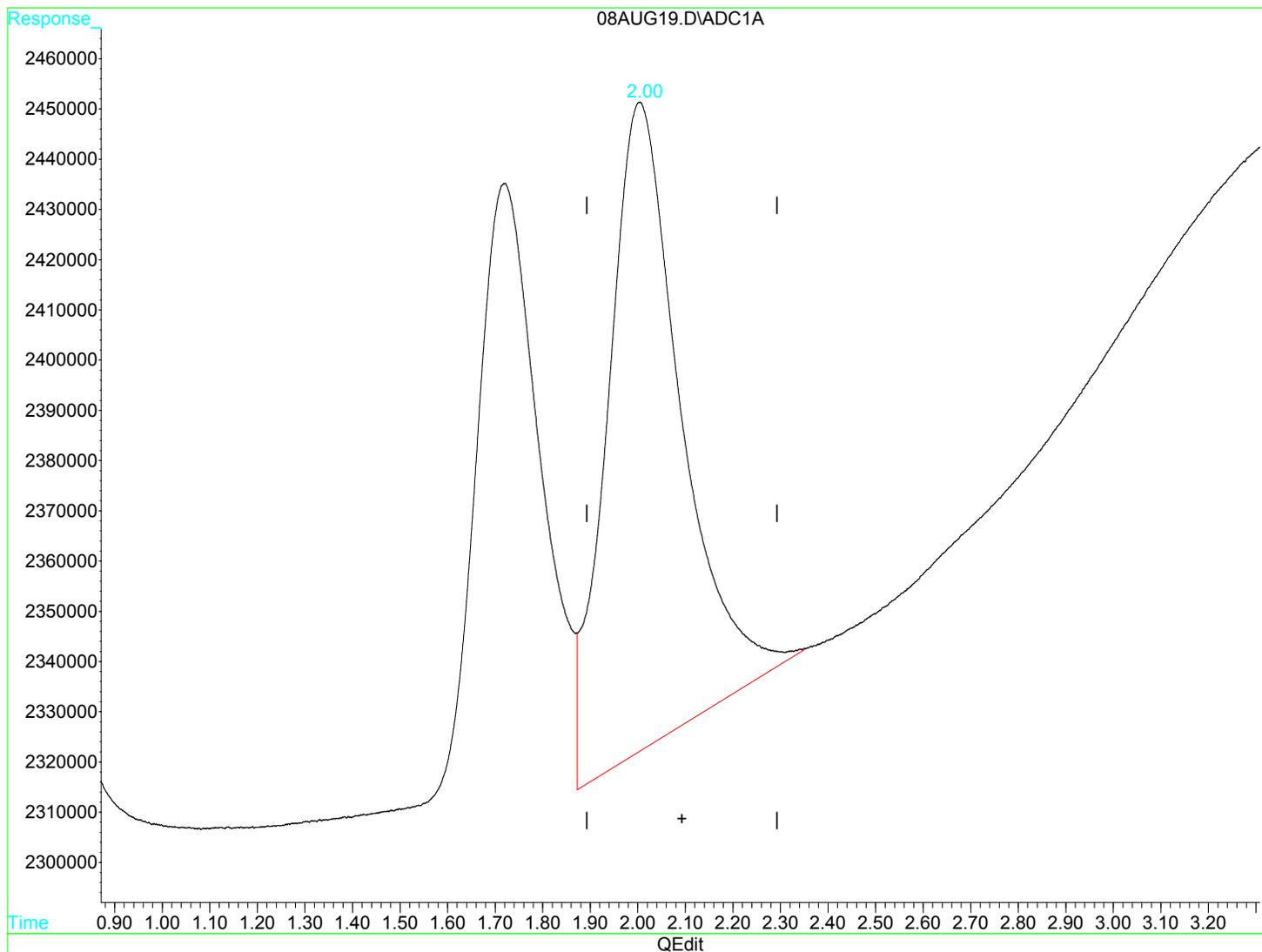


(2) Ethene (m)
 1.72min 29.977ug/L m
 response 12065096

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG19.D Vial: 19
 Acq On : 8 Aug 2017 3:19 pm Operator: JH2
 Sample : 1713976-CCV3 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 9 5:49 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 2.00min 24.044ug/L m
 response 13967414

(+) = Expected Retention Time



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Raw Data - CCB

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG03.D Vial: 3
 Acq On : 4 Aug 2017 6:52 am Operator: JH2
 Sample : 1713774-CCB1 Inst : GC-V1
 Misc : 1 He 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 8:55 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

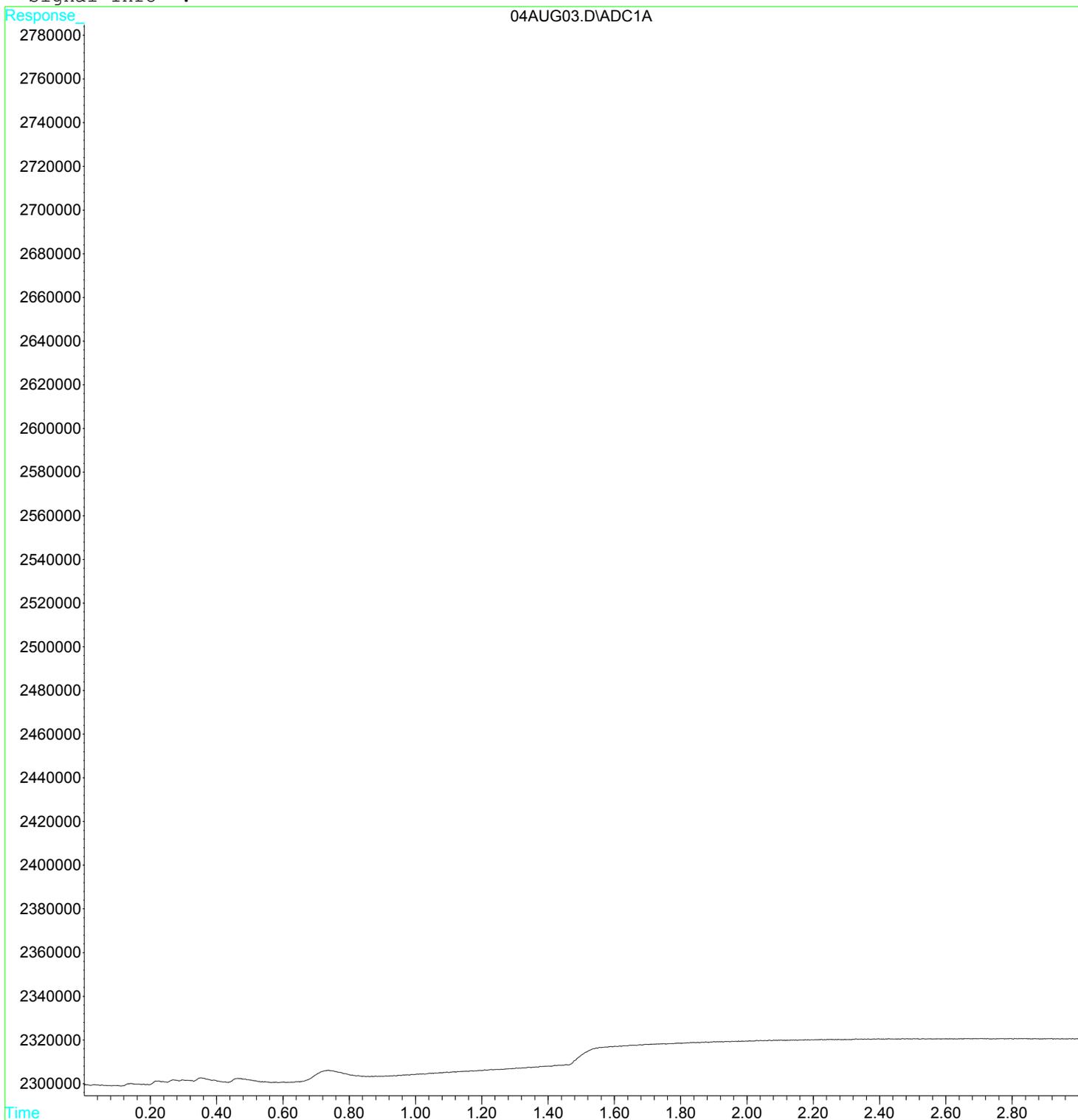
Target Compounds			
1) m Methane	0.00	0	N.D. ug/L d
2) m Ethene	0.00	0	N.D. ug/L d
3) m Ethane	0.00	0	N.D. ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG03.D Vial: 3
Acq On : 4 Aug 2017 6:52 am Operator: JH2
Sample : 1713774-CCB1 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:55 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG11.D Vial: 11
 Acq On : 4 Aug 2017 7:36 am Operator: JH2
 Sample : 1713774-CCB2 Inst : GC-V1
 Misc : 1 He 250uL1 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:03 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

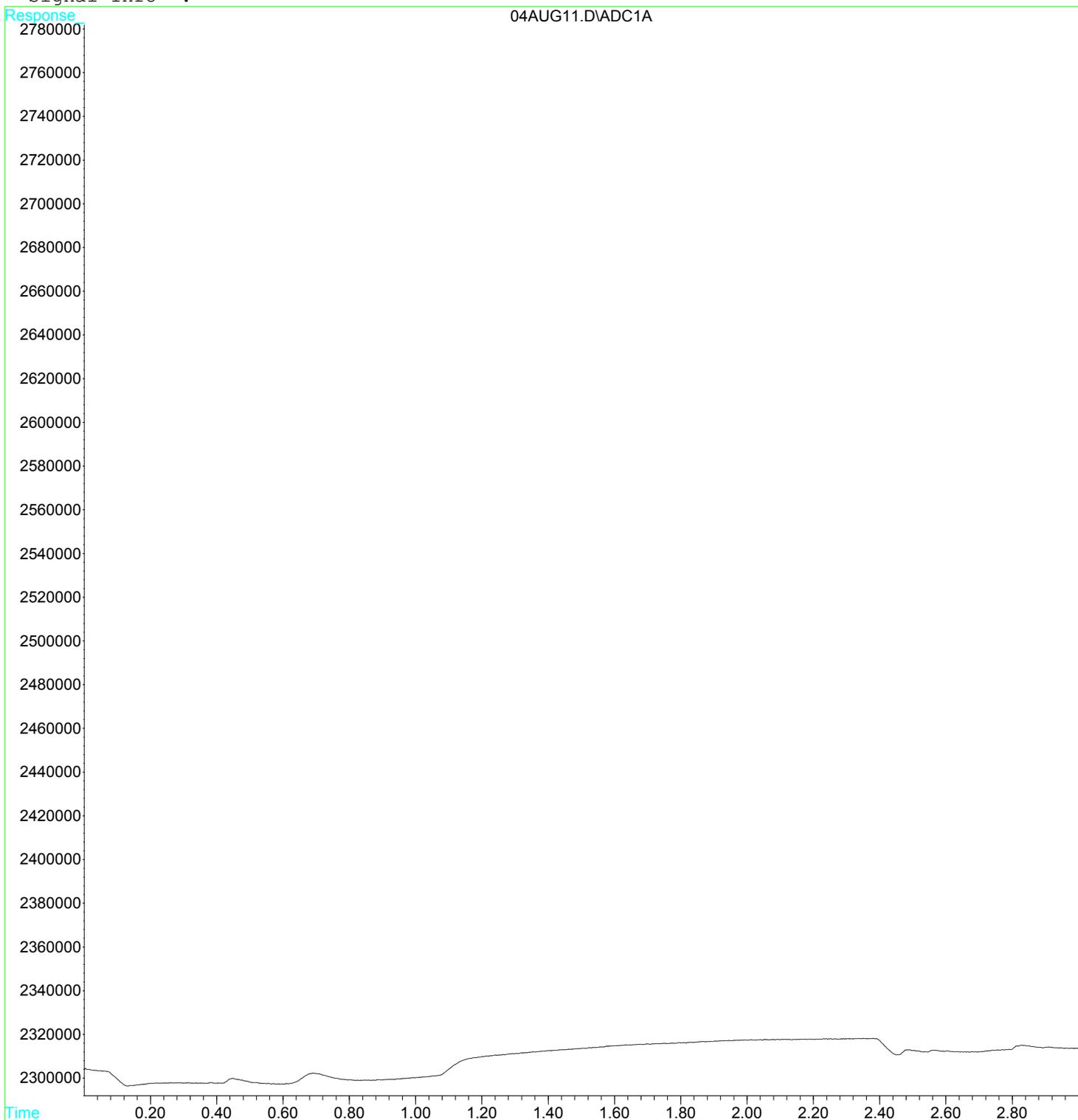
Target Compounds			
1) m Methane	0.00	0	N.D. ug/L d
2) m Ethene	0.00	0	N.D. ug/L d
3) m Ethane	0.00	0	N.D. ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG11.D Vial: 11
Acq On : 4 Aug 2017 7:36 am Operator: JH2
Sample : 1713774-CCB2 Inst : GC-V1
Misc : 1 He 250uL1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:03 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG23.D Vial: 23
 Acq On : 4 Aug 2017 10:36 am Operator: JH2
 Sample : 1713774-CCB3 Inst : GC-V1
 Misc : 1 He 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:10 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc	Units

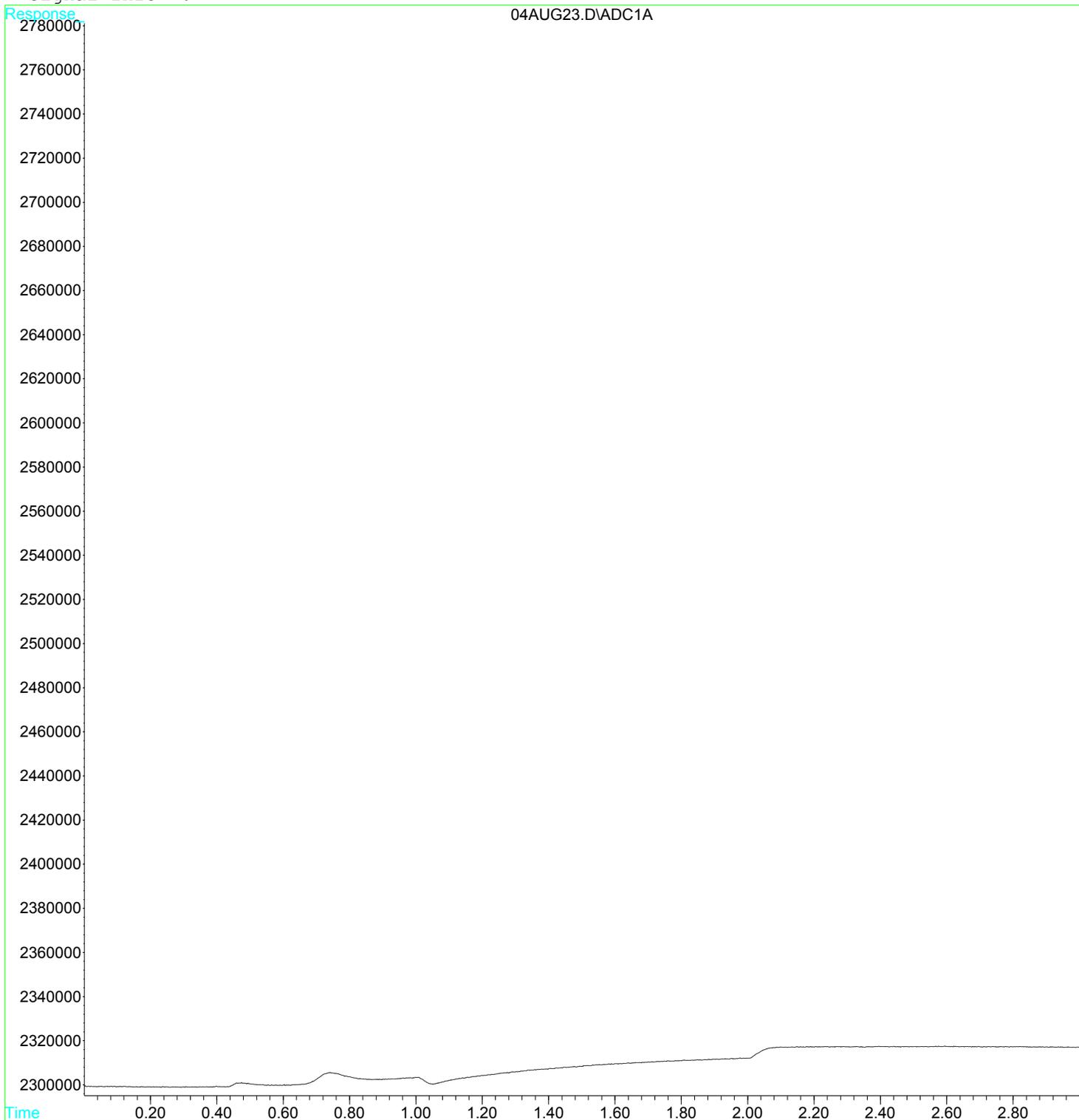
Target Compounds				
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG23.D Vial: 23
Acq On : 4 Aug 2017 10:36 am Operator: JH2
Sample : 1713774-CCB3 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:10 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG35.D Vial: 35
 Acq On : 4 Aug 2017 12:49 pm Operator: JH2
 Sample : 1713774-CCB4 Inst : GC-V1
 Misc : 1 He 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:17 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

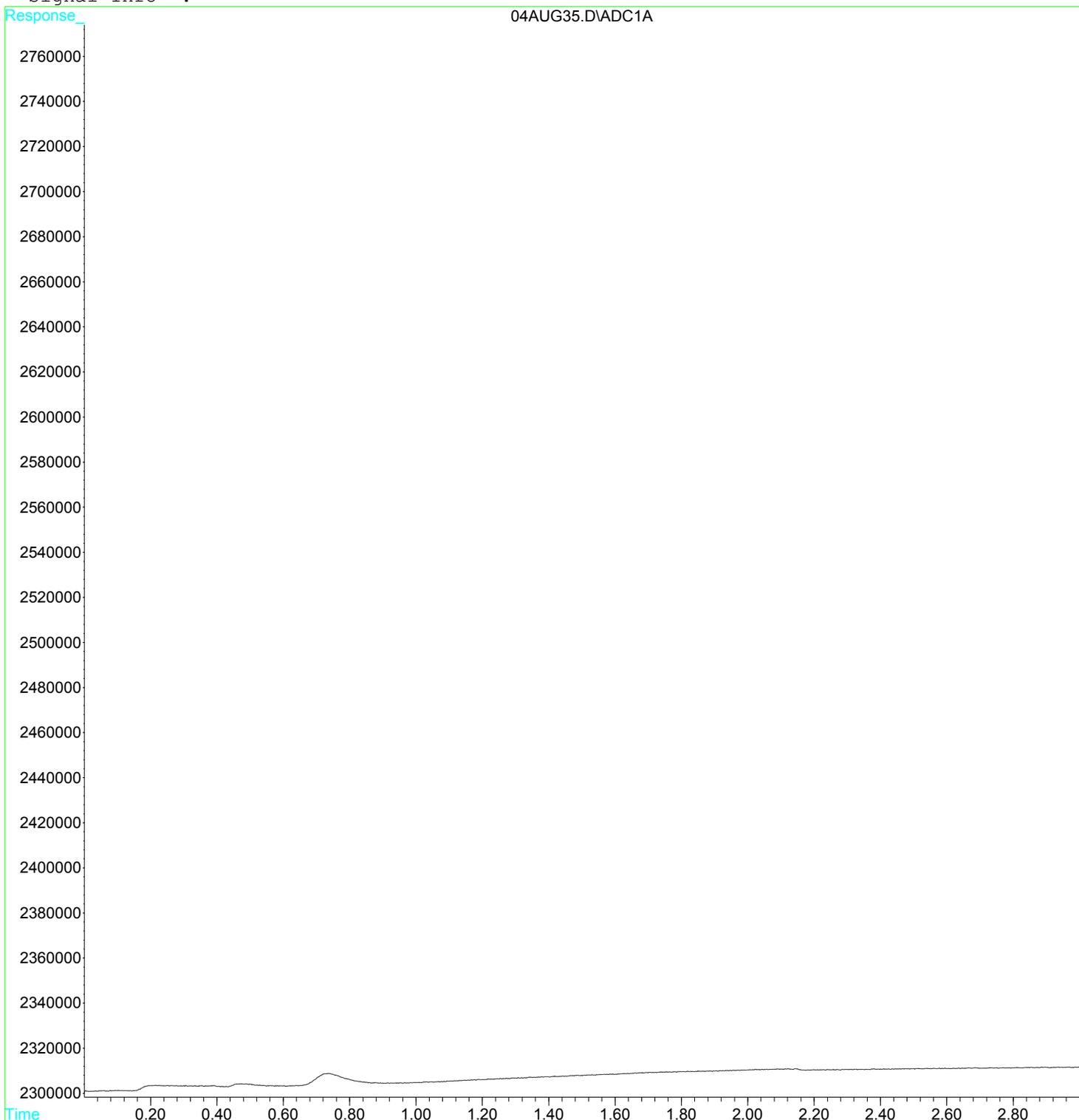
Target Compounds			
1) m Methane	0.00	0	N.D. ug/L d
2) m Ethene	0.00	0	N.D. ug/L d
3) m Ethane	0.00	0	N.D. ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG35.D Vial: 35
Acq On : 4 Aug 2017 12:49 pm Operator: JH2
Sample : 1713774-CCB4 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:17 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG41.D Vial: 41
 Acq On : 4 Aug 2017 2:39 pm Operator: JH2
 Sample : 1713774-CCB5 Inst : GC-V1
 Misc : 1 He 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 7 9:19 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc	Units

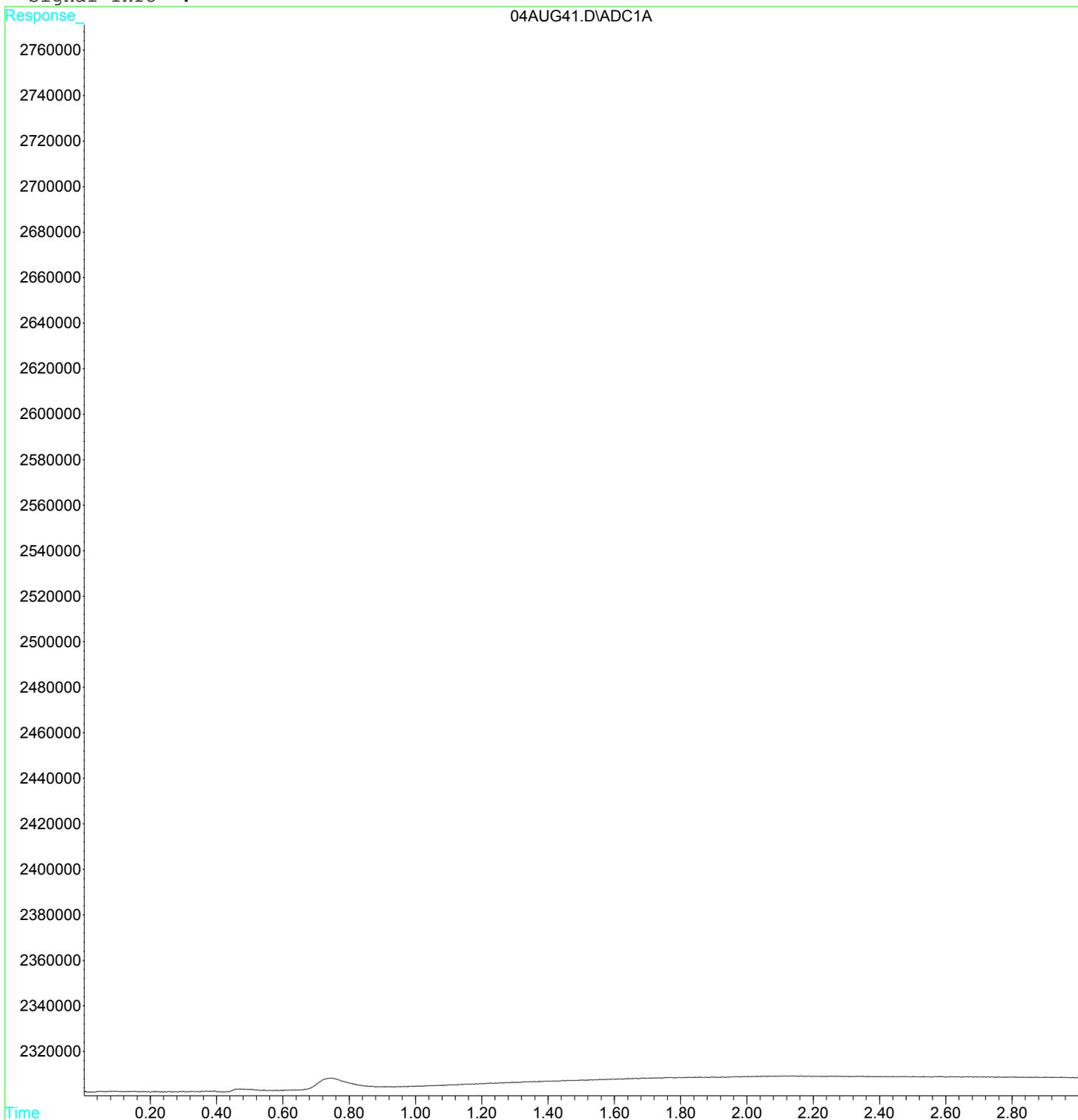
Target Compounds				
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG41.D Vial: 41
Acq On : 4 Aug 2017 2:39 pm Operator: JH2
Sample : 1713774-CCB5 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:19 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG04.D Vial: 4
 Acq On : 8 Aug 2017 8:14 am Operator: JH2
 Sample : 1713976-CCB1 Inst : GC-V1
 Misc : 1 He 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:12 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175M.M

Volume Inj. :
 Signal Phase :
 Signal Info :

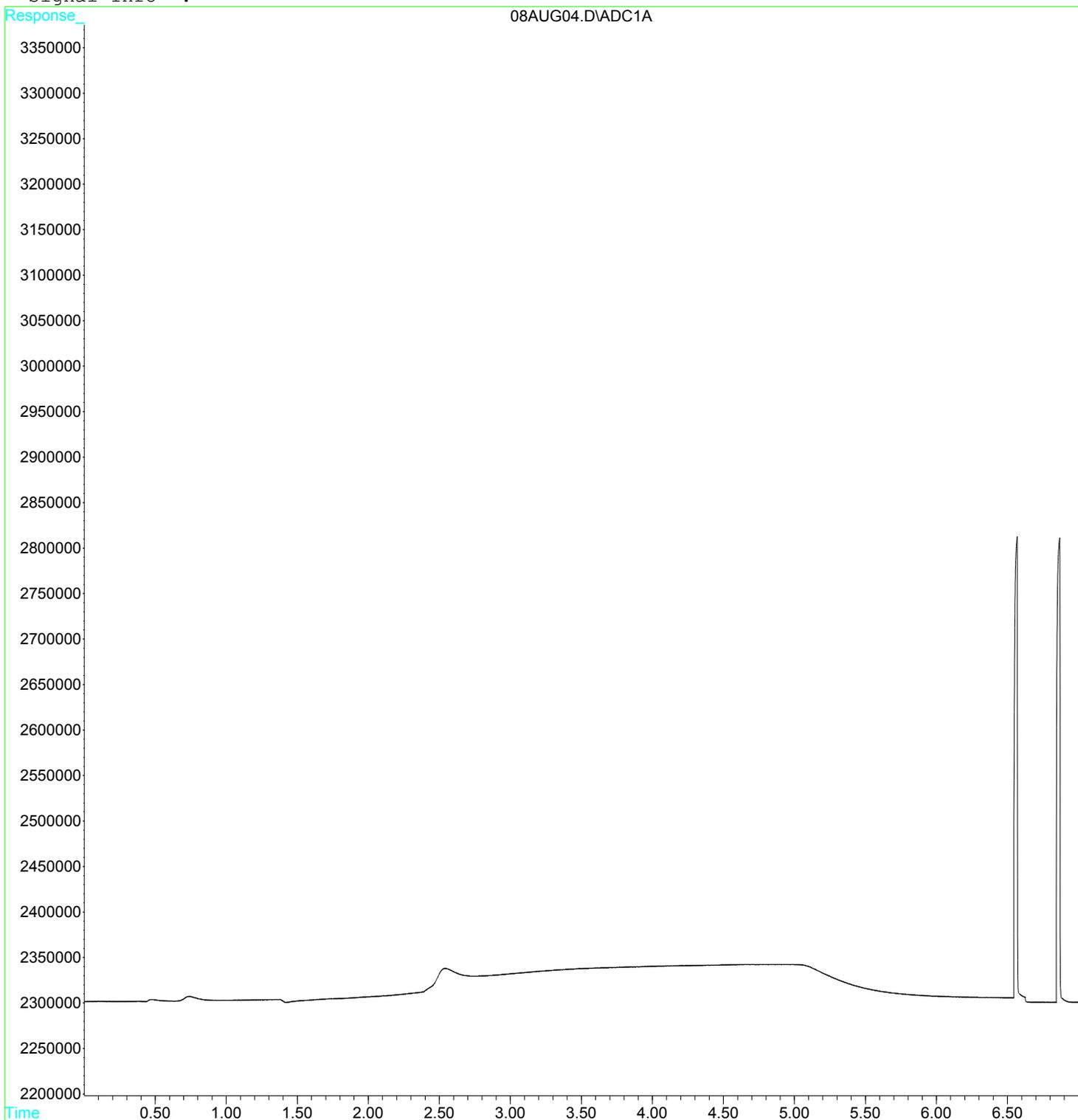
Compound	R.T.	Response	Conc Units

Target Compounds			
1) m Methane	0.00	0	N.D. ug/L d
2) m Ethene	0.00	0	N.D. ug/L
3) m Ethane	0.00	0	N.D. ug/L

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG04.D Vial: 4
Acq On : 8 Aug 2017 8:14 am Operator: JH2
Sample : 1713976-CCB1 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 8 16:12 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175M.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG12.D Vial: 12
 Acq On : 8 Aug 2017 1:35 pm Operator: JH2
 Sample : 1713976-CCB2 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:15 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175M.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc	Units

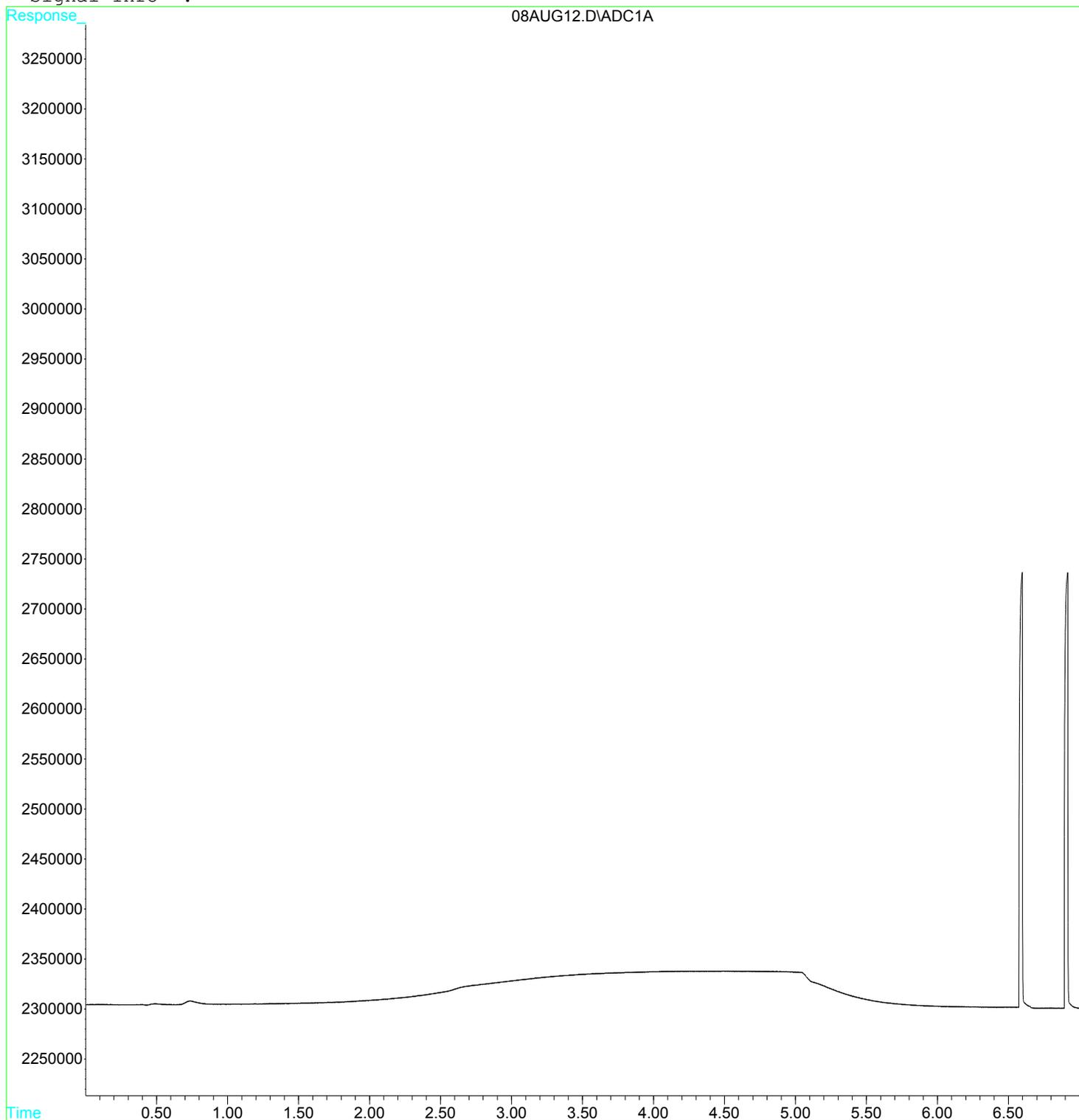
Target Compounds				
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG12.D Vial: 12
Acq On : 8 Aug 2017 1:35 pm Operator: JH2
Sample : 1713976-CCB2 Inst : GC-V1
Misc : 1 He RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 8 16:15 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175M.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG20.D Vial: 20
 Acq On : 8 Aug 2017 3:34 pm Operator: JH2
 Sample : 1713976-CCB3 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 9 5:50 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175M.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

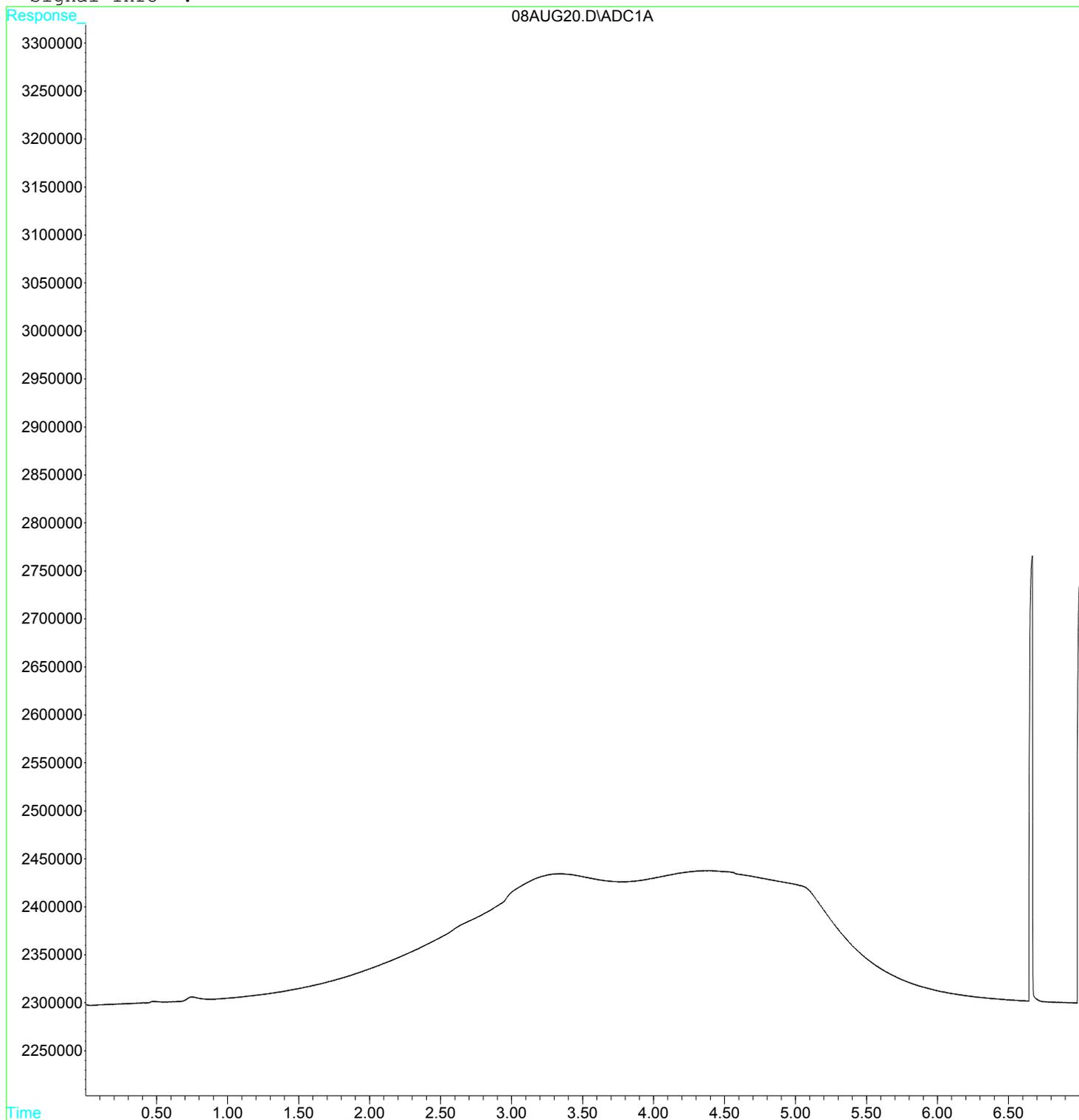
Target Compounds			
1) m Methane	0.00	0	N.D. ug/L d
2) m Ethene	0.00	0	N.D. ug/L
3) m Ethane	0.00	0	N.D. ug/L

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG20.D Vial: 20
Acq On : 8 Aug 2017 3:34 pm Operator: JH2
Sample : 1713976-CCB3 Inst : GC-V1
Misc : 1 He RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 9 5:50 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175M.M

Volume Inj. :
Signal Phase :
Signal Info :





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Raw Data - Method Blank

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG08.D Vial: 8
 Acq On : 8 Aug 2017 12:05 pm Operator: JH2
 Sample : B[H0357-BLK1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:09 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175M.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

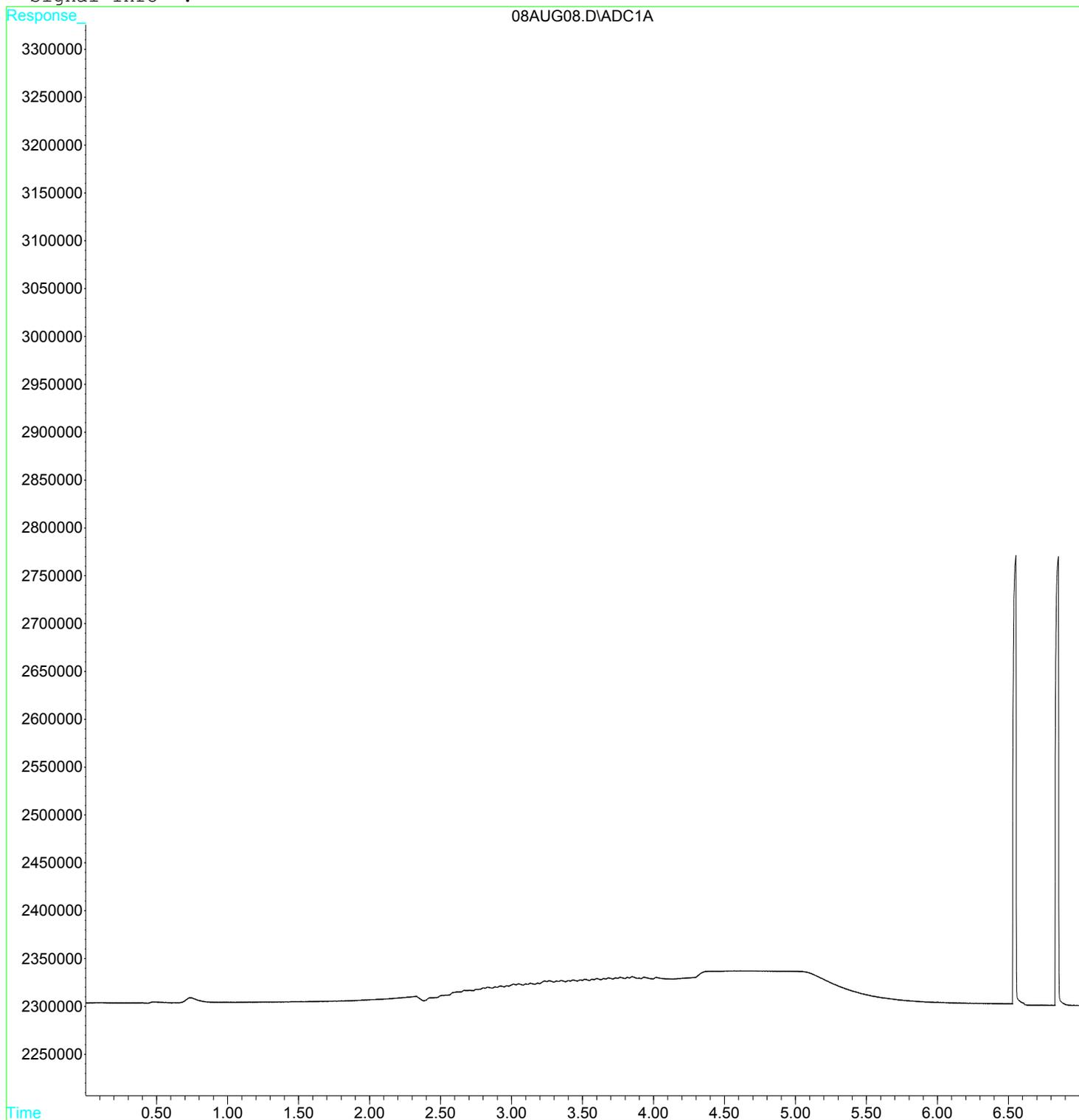
Target Compounds			
1) m Methane	0.00	0	N.D. ug/L d
2) m Ethene	0.00	0	N.D. ug/L
3) m Ethane	0.00	0	N.D. ug/L

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG08.D Vial: 8
Acq On : 8 Aug 2017 12:05 pm Operator: JH2
Sample : B[H0357-BLK1 Inst : GC-V1
Misc : 1 He RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 8 16:09 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175M.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG08.D Vial: 8
 Acq On : 8 Aug 2017 12:05 pm Operator: JH2
 Sample : B[H0358-BLK1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:09 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175M.M

Volume Inj. :
 Signal Phase :
 Signal Info :

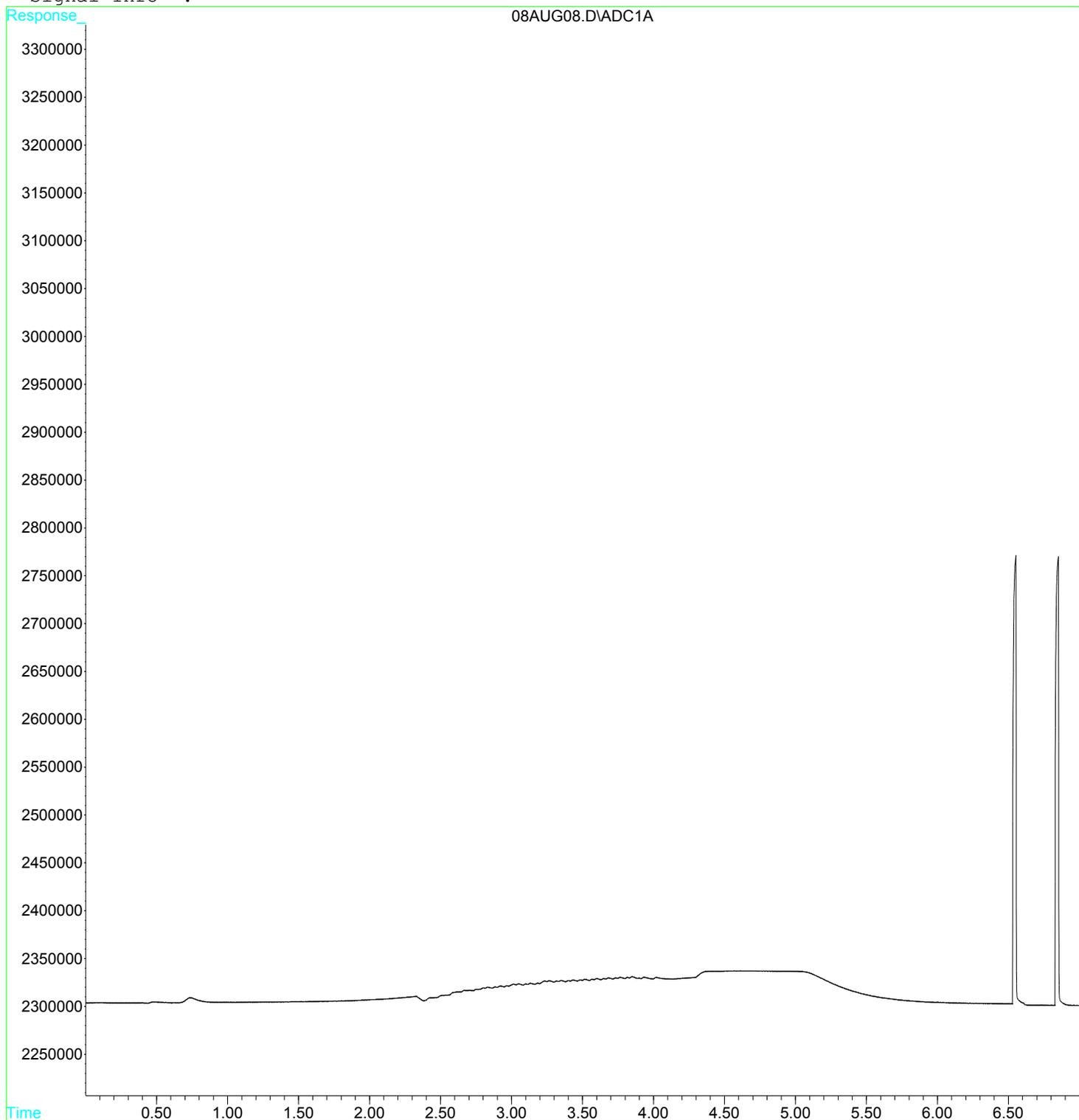
Compound	R.T.	Response	Conc Units

Target Compounds			
1) m Methane	0.00	0	N.D. ug/L d
2) m Ethene	0.00	0	N.D. ug/L
3) m Ethane	0.00	0	N.D. ug/L

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG08.D Vial: 8
Acq On : 8 Aug 2017 12:05 pm Operator: JH2
Sample : B[H0358-BLK1 Inst : GC-V1
Misc : 1 He RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 8 16:09 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175M.M

Volume Inj. :
Signal Phase :
Signal Info :





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Raw Data - Lab Control Sample

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG09.D Vial: 9
 Acq On : 8 Aug 2017 12:17 pm Operator: JH2
 Sample : B[H0358-BS1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:13 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175M.M

Volume Inj. :
 Signal Phase :
 Signal Info :

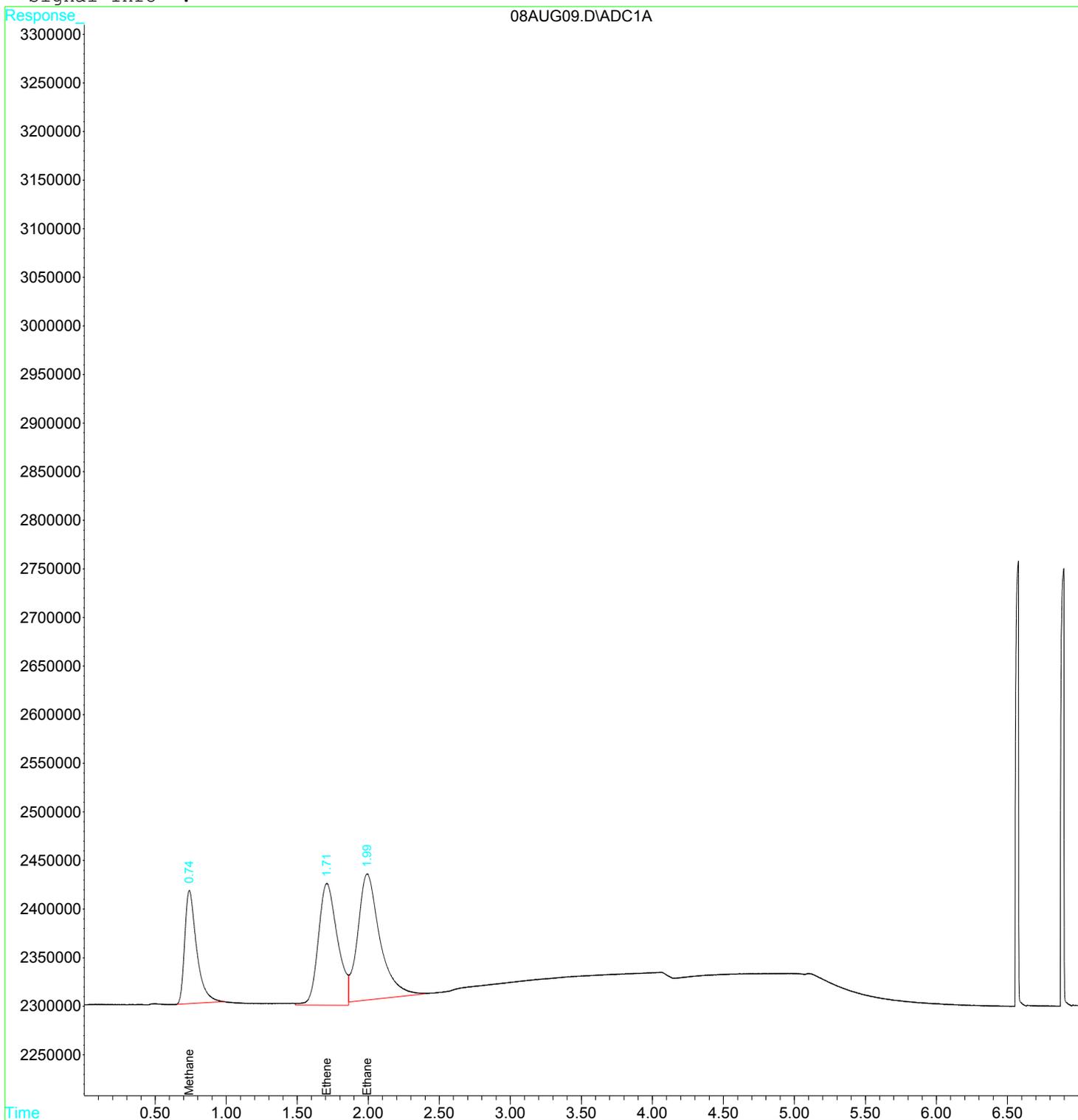
Compound	R.T.	Response	Conc Units

Target Compounds			
1) m Methane	0.74	6795342	11.2265 ug/L m
2) m Ethene	1.71	11827023	29.3856 ug/L
3) m Ethane	1.99f	14106547	24.2834 ug/L m

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG09.D Vial: 9
Acq On : 8 Aug 2017 12:17 pm Operator: JH2
Sample : B[H0358-BS1 Inst : GC-V1
Misc : 1 He RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 8 16:13 2017 Quant Results File: RSK175.RES

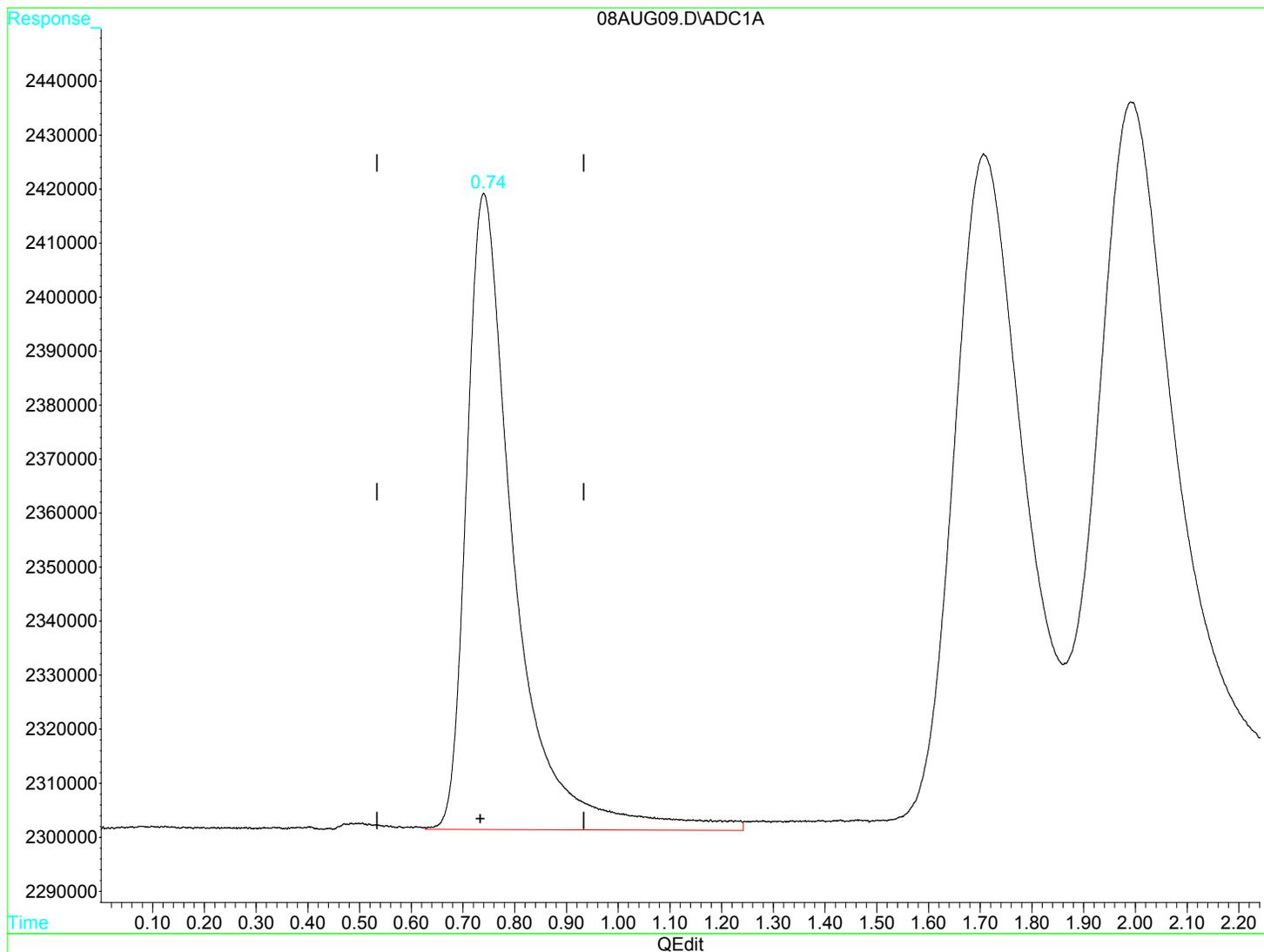
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175M.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG09.D Vial: 9
 Acq On : 8 Aug 2017 12:17 pm Operator: JH2
 Sample : B[H0358-BS1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

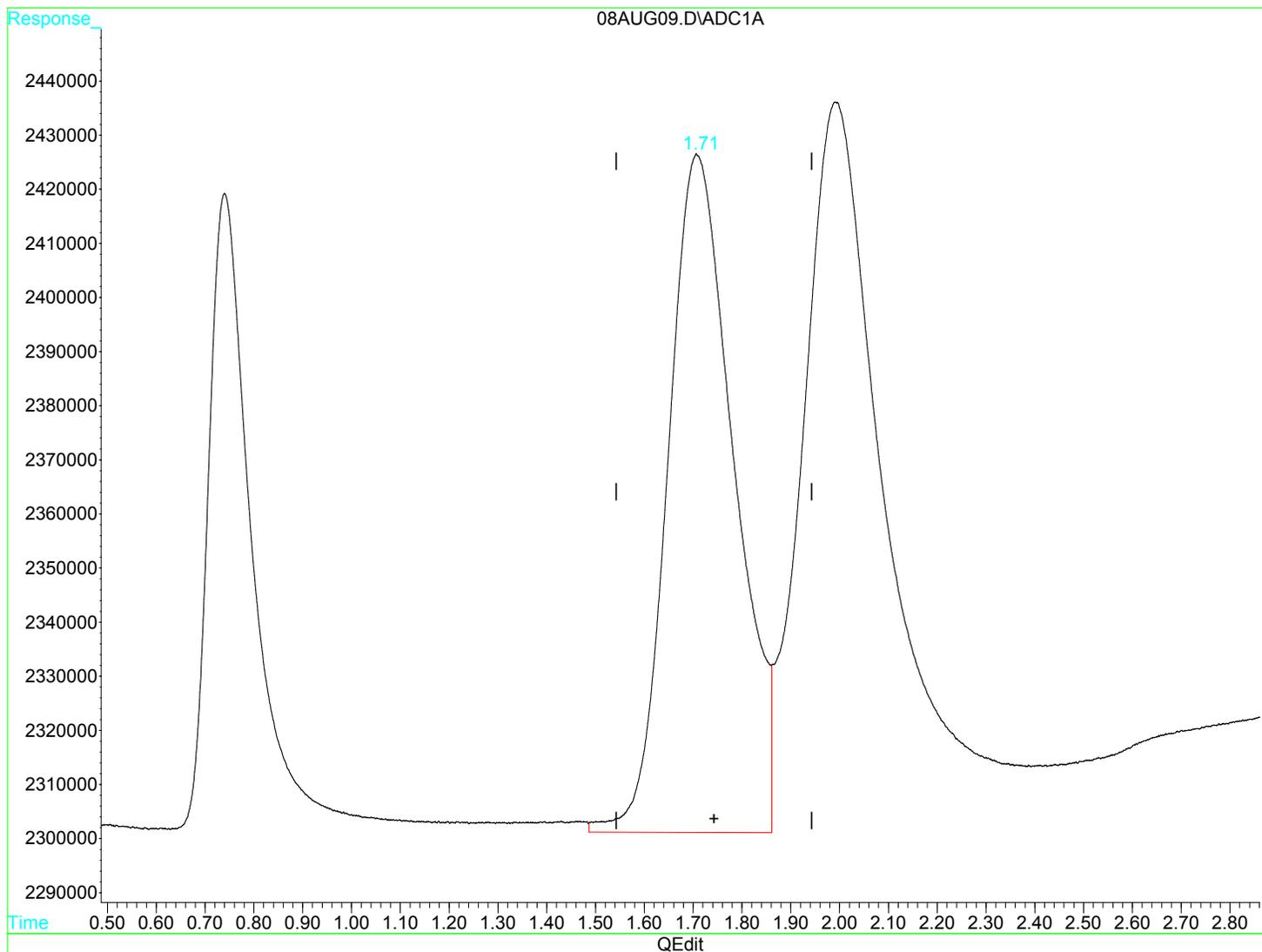


(1) Methane (m)
 0.74min 12.438ug/L
 response 7528857

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG09.D Vial: 9
 Acq On : 8 Aug 2017 12:17 pm Operator: JH2
 Sample : B[H0358-BS1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

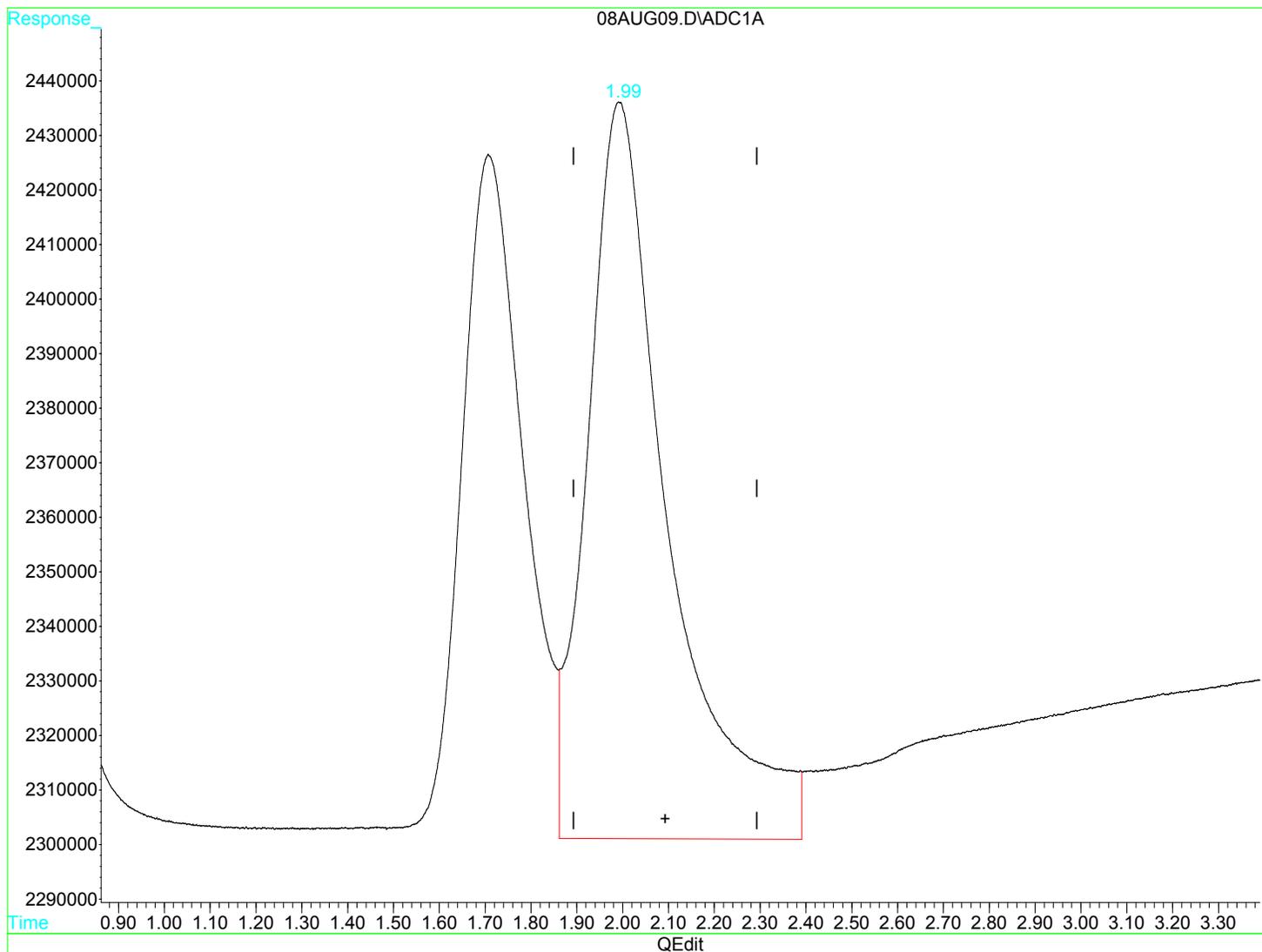
1.71min 29.386ug/L

response 11827023

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG09.D Vial: 9
 Acq On : 8 Aug 2017 12:17 pm Operator: JH2
 Sample : B[H0358-BS1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

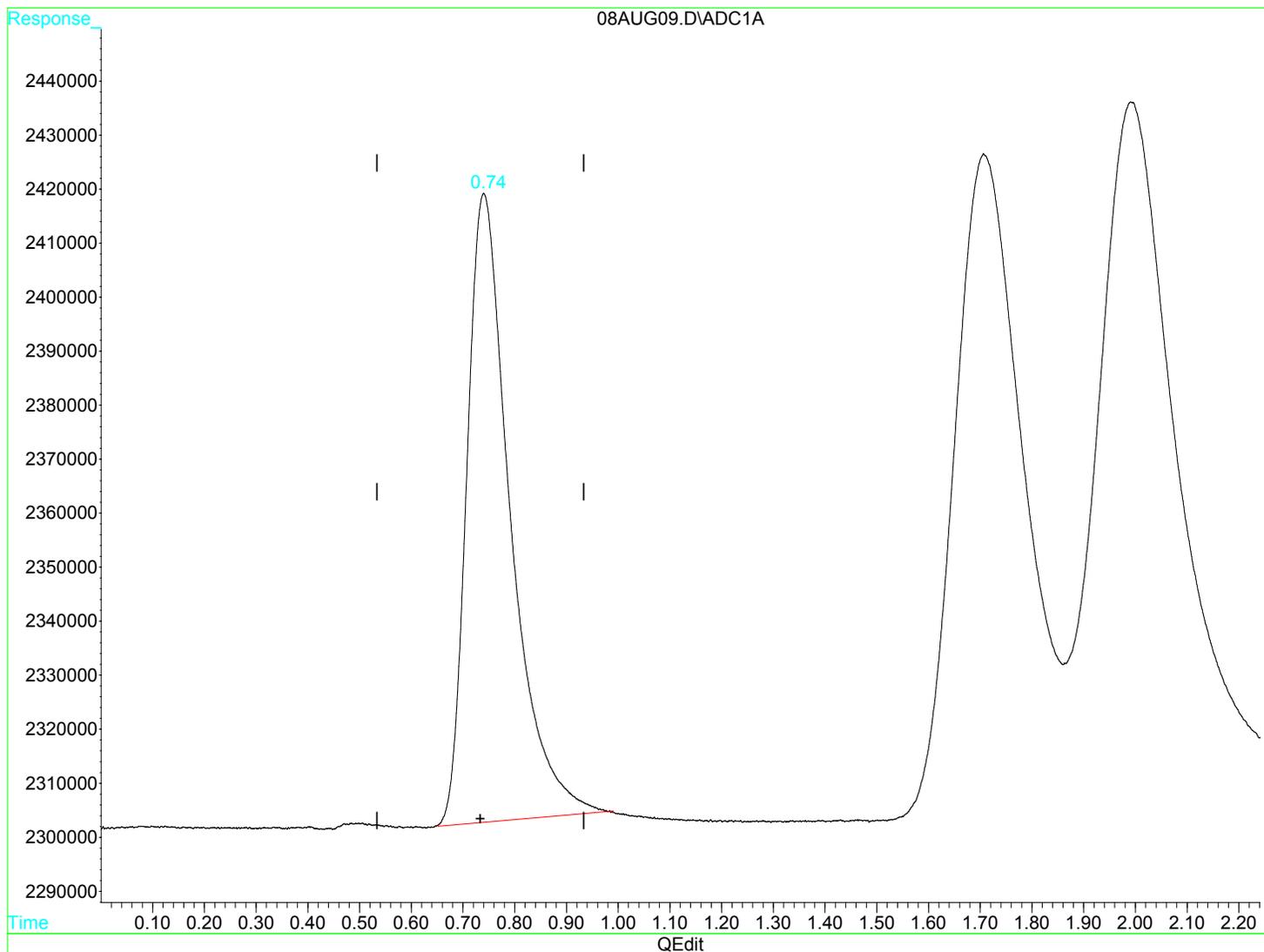


(3) Ethane (m)
 1.99min 28.394ug/L
 response 16494498

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG09.D Vial: 9
 Acq On : 8 Aug 2017 12:17 pm Operator: JH2
 Sample : B[H0358-BS1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

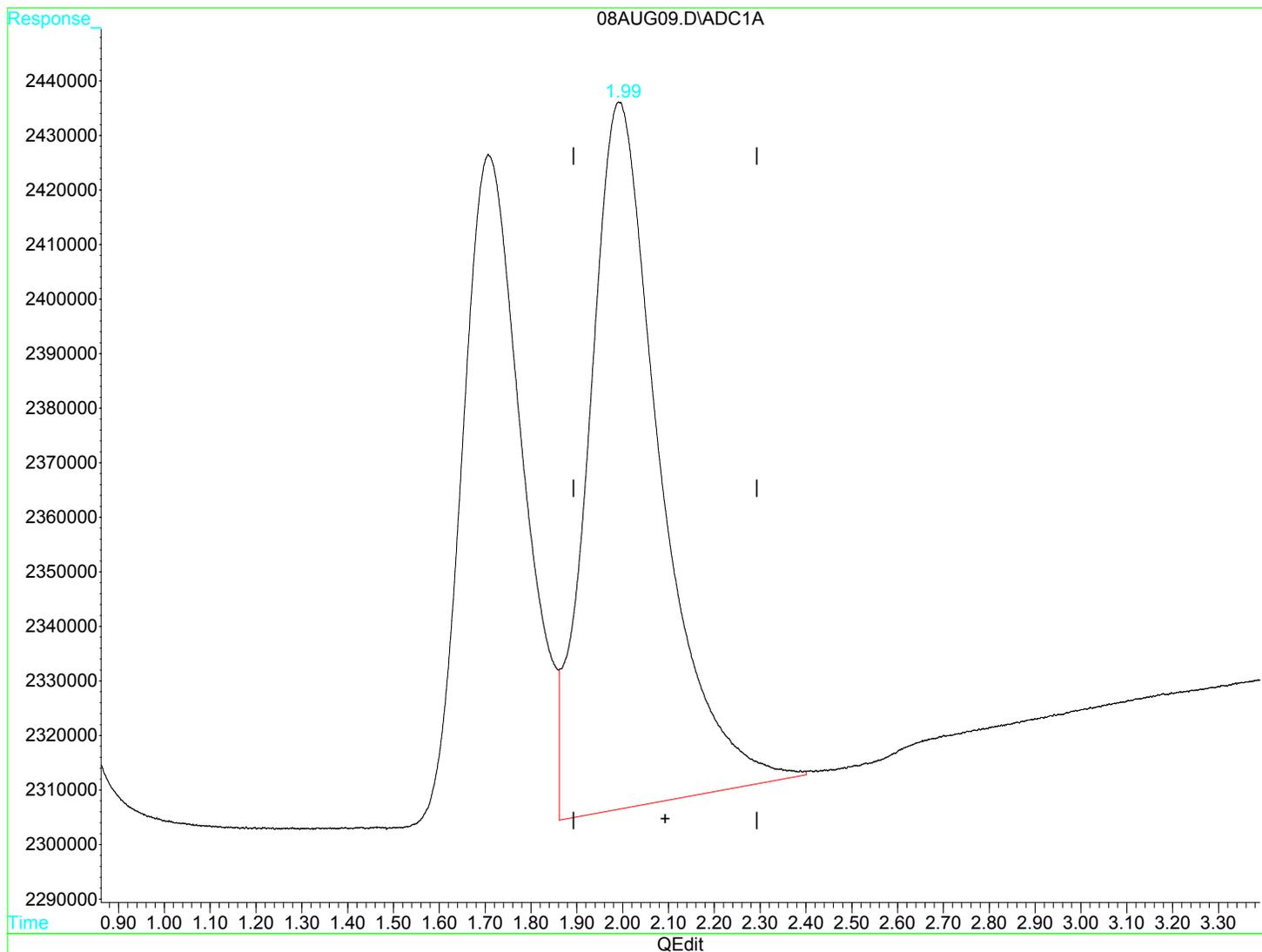
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)
 0.74min 11.227ug/L m
 response 6795342

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG09.D Vial: 9
 Acq On : 8 Aug 2017 12:17 pm Operator: JH2
 Sample : B[H0358-BS1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 1.99min 24.283ug/L m
 response 14106547

(+) = Expected Retention Time



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Lab Control Sample Duplicate

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG10.D Vial: 10
 Acq On : 8 Aug 2017 12:28 pm Operator: JH2
 Sample : B[H0358-BSD1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:13 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Initial Calibration
 DataAcq Meth : RSK175M.M

Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units

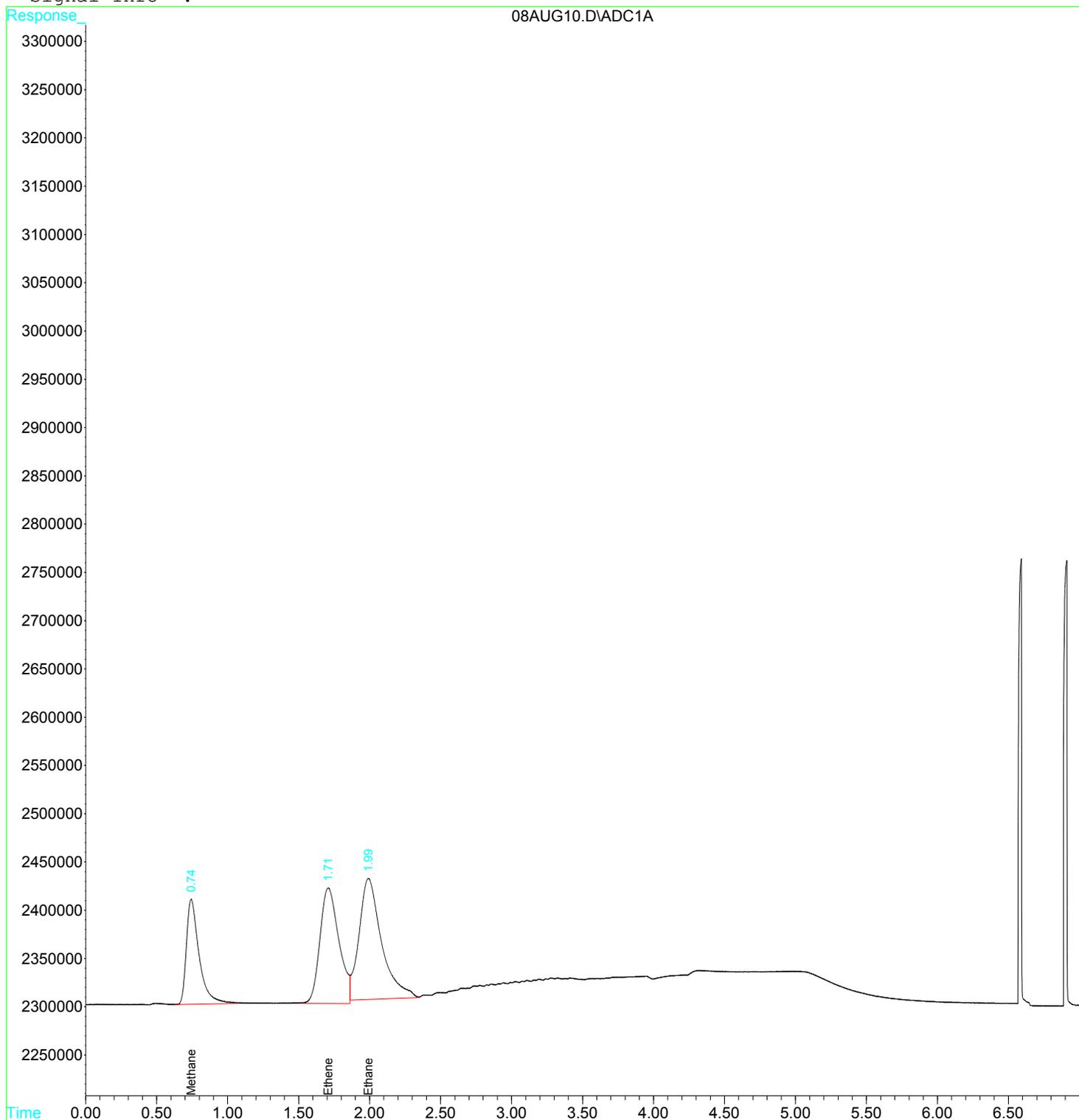
Target Compounds			
1) m Methane	0.74	6779840	11.2009 ug/L
2) m Ethene	1.71	11167983	27.7481 ug/L
3) m Ethane	1.99f	13843523	23.8307 ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG10.D Vial: 10
Acq On : 8 Aug 2017 12:28 pm Operator: JH2
Sample : B[H0358-BSD1 Inst : GC-V1
Misc : 1 He RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 8 16:13 2017 Quant Results File: RSK175.RES

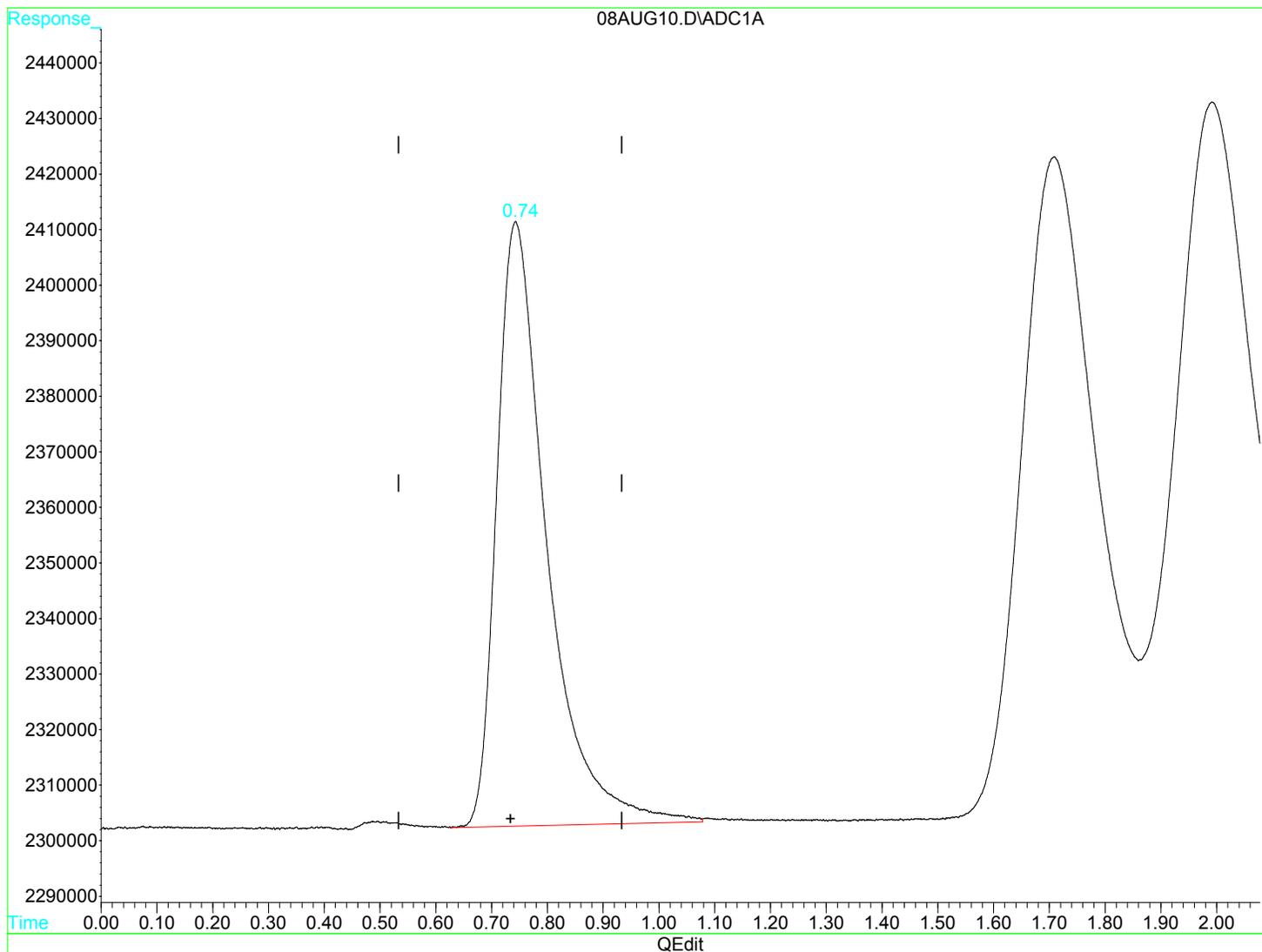
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175M.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG10.D Vial: 10
 Acq On : 8 Aug 2017 12:28 pm Operator: JH2
 Sample : B[H0358-BSD1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

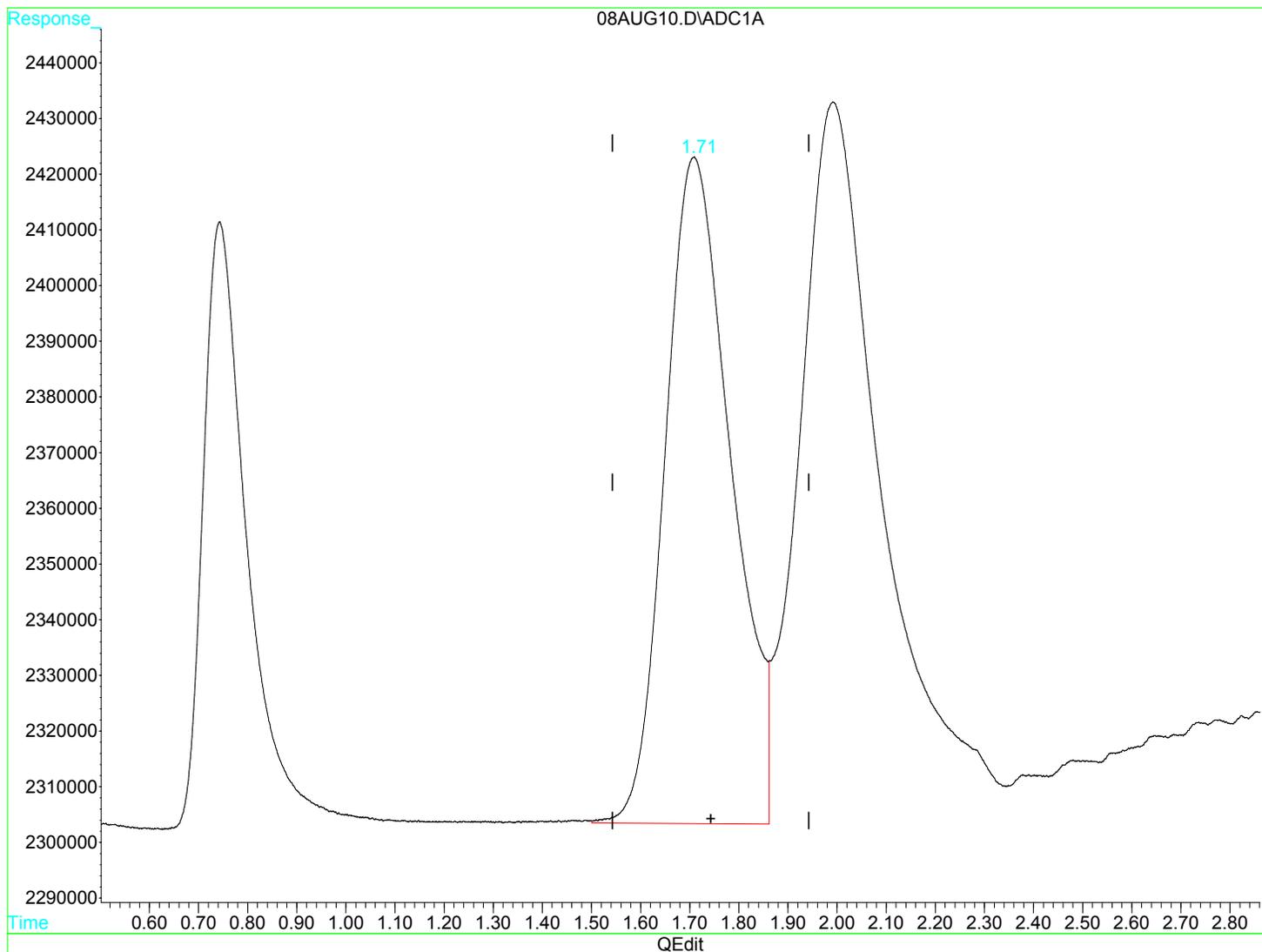


(1) Methane (m)
 0.74min 11.201ug/L
 response 6779840

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG10.D Vial: 10
 Acq On : 8 Aug 2017 12:28 pm Operator: JH2
 Sample : B[H0358-BSD1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

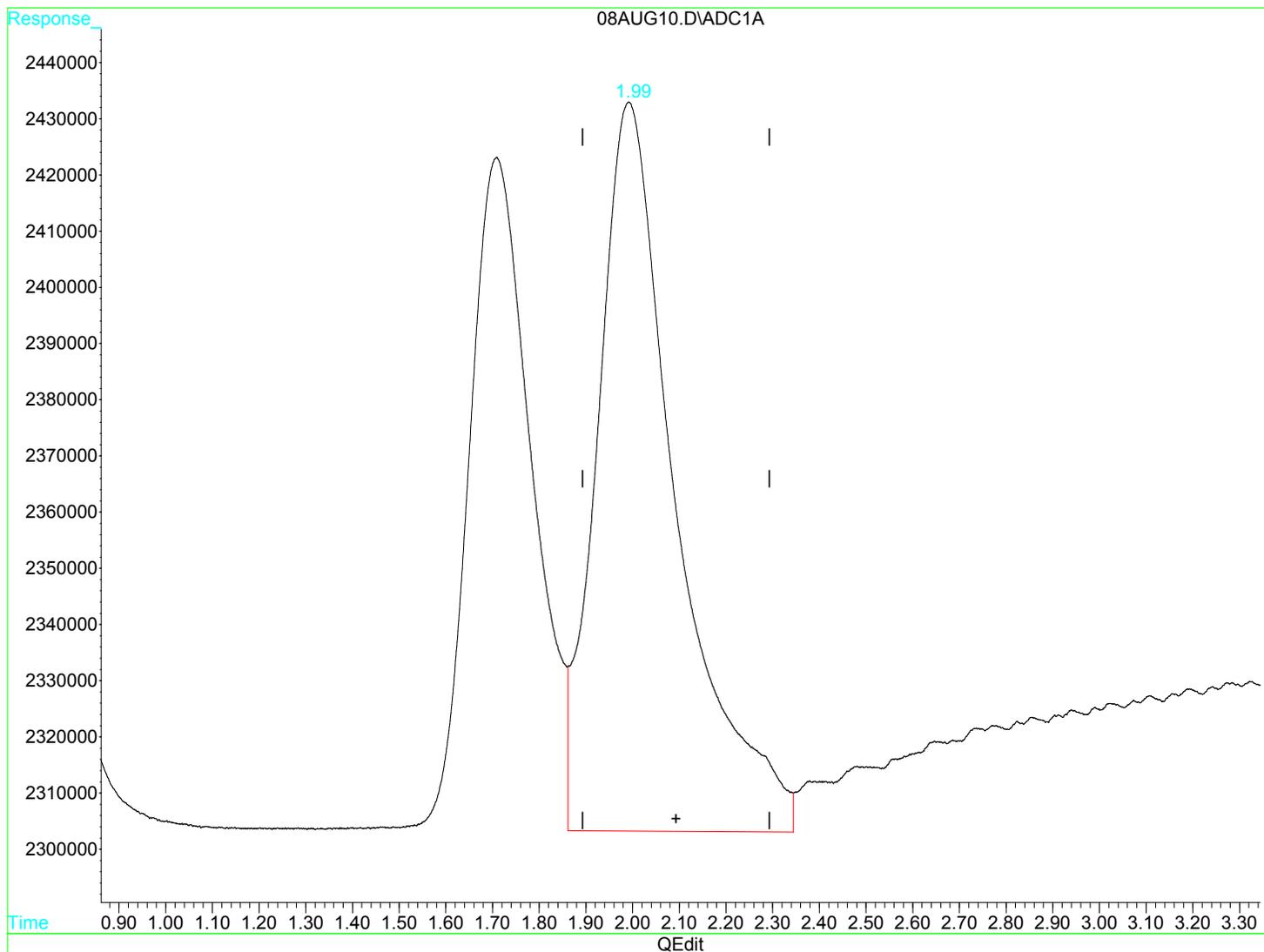


(2) Ethene (m)
 1.71min 27.748ug/L
 response 11167983

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG10.D Vial: 10
 Acq On : 8 Aug 2017 12:28 pm Operator: JH2
 Sample : B[H0358-BSD1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration

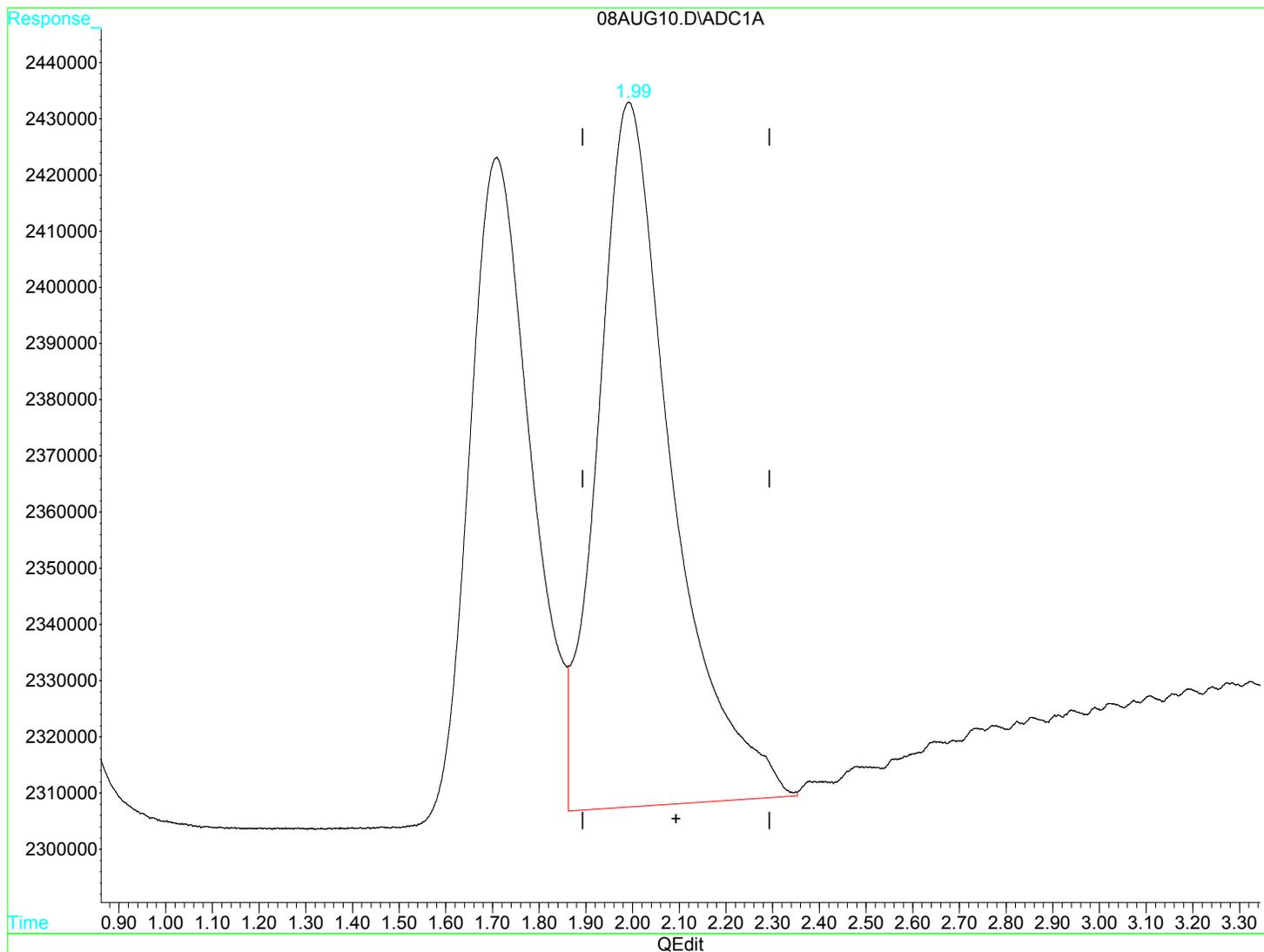


(3) Ethane (m)
 1.99min 26.318ug/L
 response 15288494

(+) = Expected Retention Time

Data File : D:\GC-V1\2017\AUG2017\AUG08\08AUG10.D Vial: 10
 Acq On : 8 Aug 2017 12:28 pm Operator: JH2
 Sample : B[H0358-BSD1 Inst : GC-V1
 Misc : 1 He RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 8 16:10 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)
 1.99min 23.831ug/L m
 response 13843523

(+) = Expected Retention Time



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[H0358

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Volatiles - GC - RSK-175M

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720405-01 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:25PM	JH2	1	1					
1720405-03 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:25PM	JH2	1	1					
1720405-04 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:25PM	JH2	1	1					
1720405-05 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:25PM	JH2	1	1					
1720405-06 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:25PM	JH2	1	1					
1720405-13 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:25PM	JH2	1	1					
1720405-14 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:25PM	JH2	1	1					
1720405-15 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:25PM	JH2	1	1					
1720405-17 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:25PM	JH2	1	1					
B[H0358-BLK1	QC	8/3/2017 3:25PM	JH2	1	1					
B[H0358-BS1	QC	8/3/2017 3:25PM	JH2	1	1	7B07033		1000		
B[H0358-BSD1	QC	8/3/2017 3:25PM	JH2	1	1	7B07033		1000		

Spike Mixes	Description	Solvent	Prepared	Expires
7B07033	RSK-175M Spike	Helium	1/27/2017 by zzzJacob Hernand	1/27/2018



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1701454

Instrument: GC-V1

Calibration ID: 1702007

Sequence Date: 01/27/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1701454-CAL1	QC		1		7B07021		
1701454-CAL2	QC		2		7B07022		
1701454-CAL3	QC		3		7B07023		
1701454-CAL4	QC		4		7B07024		
1701454-ICV1	QC		5		7B07025		
1701454-ICB1	QC		6		7B07026		



ANALYSIS SEQUENCE

1713774

Instrument: GC-V1
Calibration ID: 1702007

Sequence Date: 08/04/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713774-ICV1	QC		1		7B07022		
1713774-ICB1	QC		2		7B07026		
1713774-CCV1	QC		3		7D17080		
1713774-CCB1	QC		4		6A07009		
B[H0355-BLK1	QC		5				
B[H0355-BS1	QC		6				
B[H0355-BSD1	QC		7				
B[H0356-BLK1	QC		8				
B[H0356-BS1	QC		9				
B[H0356-BSD1	QC		10				
1713774-CCV2	QC		11		7D17080		
1713774-CCB2	QC		12		6A07009		
1720228-01	gRSK175 Diss Methane	E	13				
1720352-01	gRSK175 Diss Methane	E	14				
1720353-01	gRSK175 Diss Methane	E	15				
1720267-04	gmRSK175 Diss Methane, Ethan	A	16				
1720267-08	gmRSK175 Diss Methane, Ethan	A	17				
1720267-09	gmRSK175 Diss Methane, Ethan	A	18				
1720267-10	gmRSK175 Diss Methane, Ethan	A	19				
1720267-11	gmRSK175 Diss Methane, Ethan	A	20				
1720313-05	gRSK175 Diss Methan, Ethane, l	A	21				
1720313-06	gRSK175 Diss Methan, Ethane, l	A	22				
1713774-CCV3	QC		23		7D17080		
1713774-CCB3	QC		24		6A07009		
1720313-07	gRSK175 Diss Methan, Ethane, l	A	25				
1720313-08	gRSK175 Diss Methan, Ethane, l	A	26				
1720313-09	gRSK175 Diss Methan, Ethane, l	A	27				
1720405-01	gmRSK175 Diss Methane, Ethan	A	28				
1720405-03	gmRSK175 Diss Methane, Ethan	A	29				
1720405-04	gmRSK175 Diss Methane, Ethan	A	30				
1720405-05	gmRSK175 Diss Methane, Ethan	A	31				
1720405-06	gmRSK175 Diss Methane, Ethan	A	32				
1720405-13	gmRSK175 Diss Methane, Ethan	A	33				
1720405-14	gmRSK175 Diss Methane, Ethan	A	34				
1713774-CCV4	QC		35		7D17080		
1713774-CCB4	QC		36		6A07009		
1720405-15	gmRSK175 Diss Methane, Ethan	A	37				
1720405-17	gmRSK175 Diss Methane, Ethan	A	38				
1713774-CCV5	QC		39		7D17080		



ANALYSIS SEQUENCE

1713774

Instrument: GC-V1

Calibration ID: 1702007

Sequence Date: 08/04/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713774-CCB5	QC		40		6A07009		



ANALYSIS SEQUENCE

1713976

Instrument: GC-V1
Calibration ID: 1702007

Sequence Date: 08/08/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713976-ICV1	QC		1		7B07022		
1713976-ICB1	QC		2		7B07026		
1713976-CCV1	QC		3		7D17080		
1713976-CCB1	QC		4		6A07009		
B[H0358-BLK1	QC		5				
B[H0358-BS1	QC		6				
B[H0358-BSD1	QC		7				
1713976-CCV2	QC		8		7D17080		
1713976-CCB2	QC		9		6A07009		
1720488-01	gRSK175 Diss Methane	E	10				
1720331-01	gRSK175w Full	A	11				Methane,Ethane,Propane
1720331-02	gRSK175w Full	A	12				Methane,Ethane,Propane
1720332-01	gRSK175w Full	A	13				Methane,Ethane,Propane
1720332-02	gRSK175w Full	A	14				Methane,Ethane,Propane
1720332-03	gRSK175w Full	A	15				Methane,Ethane,Propane
1713976-CCV3	QC		16		7D17080		
1713976-CCB3	QC		17		6A07009		



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20405
Class: METALS-PPB
Method: EPA-6020



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE

EPA-6020

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Client Sample Id:

Lab Sample Id:

28SW02_170725

1720405-07

28SW03_170725

1720405-08

28SW08_170725

1720405-09

EB24_170725

1720405-19

EB25_170725

1720405-20

EB26_170725

1720405-21

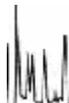
I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: Sara Guron

Date: 08-25-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS

EPA-6020

Laboratory: BC Laboratories

SDG: 17-20405

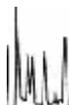
Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: PE-EL2

Analyte	DL	LOD	LOQ	Units
Arsenic	0.38	1	2	ug/L
Copper	0.32	1	2	ug/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-6020

28SW02_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-07

File ID: PE_EL2_170728-051

Sampled: 07/25/17 08:16

Prepared: 07/27/17 06:00

Analyzed: 07/28/17 10:34

Solids: 0.00

Preparation: EPA 3005A

Initial/Final: 10 ml / 10 ml

Batch: BIG2277

Sequence: 1713355

Calibration: UNASSIGNED

Instrument: PE-EL2

CAS NO.	Analyte	Concentration (ug/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
7440-38-2	Arsenic	120	3.8	10	20	10	D	EPA-6020
7440-50-8	Copper	150	3.2	10	20	10	D	EPA-6020



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-6020

28SW03_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-08

File ID: PE_EL2_170728-052

Sampled: 07/25/17 08:15

Prepared: 07/27/17 06:00

Analyzed: 07/28/17 10:37

Solids: 0.00

Preparation: EPA 3005A

Initial/Final: 10 ml / 10 ml

Batch: BIG2277

Sequence: 1713355

Calibration: UNASSIGNED

Instrument: PE-EL2

CAS NO.	Analyte	Concentration (ug/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
7440-38-2	Arsenic	88	3.8	10	20	10	D	EPA-6020
7440-50-8	Copper	65	3.2	10	20	10	D	EPA-6020



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-6020

28SW08_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-09

File ID: PE_EL2_170728-053

Sampled: 07/25/17 08:18

Prepared: 07/27/17 06:00

Analyzed: 07/28/17 10:41

Solids: 0.00

Preparation: EPA 3005A

Initial/Final: 10 ml / 10 ml

Batch: BIG2277

Sequence: 1713355

Calibration: UNASSIGNED

Instrument: PE-EL2

CAS NO.	Analyte	Concentration (ug/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
7440-38-2	Arsenic	160	3.8	10	20	10	D	EPA-6020
7440-50-8	Copper	51	3.2	10	20	10	D	EPA-6020



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-6020

EB24_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-19

File ID: PE_EL2_170728-041

Sampled: 07/25/17 14:05

Prepared: 07/27/17 06:00

Analyzed: 07/28/17 09:59

Solids: 0.00

Preparation: EPA 3005A

Initial/Final: 10 ml / 10 ml

Batch: BIG2277

Sequence:

1713355

Calibration: UNASSIGNED

Instrument: PE-EL2

CAS NO.	Analyte	Concentration (ug/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
7440-38-2	Arsenic	1.0	0.38	1.0	2.0	1	U	EPA-6020
7440-50-8	Copper	1.6	0.32	1.0	2.0	1	J	EPA-6020



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-6020

EB25_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-20

File ID: PE_EL2_170728-046

Sampled: 07/25/17 14:10

Prepared: 07/27/17 06:00

Analyzed: 07/28/17 10:16

Solids: 0.00

Preparation: EPA 3005A

Initial/Final: 10 ml / 10 ml

Batch: BIG2277

Sequence: 1713355

Calibration: UNASSIGNED

Instrument: PE-EL2

CAS NO.	Analyte	Concentration (ug/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
7440-38-2	Arsenic	1.0	0.38	1.0	2.0	1	U	EPA-6020
7440-50-8	Copper	1.0	0.32	1.0	2.0	1	U	EPA-6020



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-6020

EB26_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-21

File ID: PE_EL2_170728-047

Sampled: 07/25/17 14:15

Prepared: 07/27/17 06:00

Analyzed: 07/28/17 10:20

Solids: 0.00

Preparation: EPA 3005A

Initial/Final: 10 ml / 10 ml

Batch: BIG2277

Sequence:

1713355

Calibration: UNASSIGNED

Instrument: PE-EL2

CAS NO.	Analyte	Concentration (ug/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
7440-38-2	Arsenic	1.0	0.38	1.0	2.0	1	U	EPA-6020
7440-50-8	Copper	1.6	0.32	1.0	2.0	1	J	EPA-6020



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-6020

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>		
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>		
Matrix:	<u>Water</u>	Laboratory ID:	<u>BIG2277-BLK1</u>	File ID:	<u>PE EL2 170728-040</u>
Prepared:	<u>07/27/17 06:00</u>	Preparation:	<u>EPA 3005A</u>	Initial/Final:	<u>10 ml / 10 ml</u>
Analyzed:	<u>07/28/17 09:56</u>	Instrument:	<u>PE-EL2</u>		
Batch:	<u>BIG2277</u>	Sequence:	<u>1713355</u>	Calibration:	<u>UNASSIGNED</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
7440-38-2	Arsenic	1.0	0.38	1.0	2.0	U
7440-50-8	Copper	1.0	0.32	1.0	2.0	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES

EB24 170725

EPA-6020

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2277-DUP1

Batch: B[G2277

Lab Source ID: 1720405-19

Preparation: EPA 3005A

Initial/Final: 10 ml / 10 ml

Source Sample Name: EB24_170725

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (ug/L)	C	DUPLICATE CONCENTRATION (ug/L)	C	RPD %	Q	METHOD
Arsenic	20	-0.30500		ND				EPA-6020
Copper	20	1.6440		1.5740		4.35		EPA-6020

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-6020

EB24 170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: BIG2277 Laboratory ID: BIG2277-MS1
Preparation: EPA 3005A Initial/Final: 9.8 ml / 10 ml
Source Sample Number: 1720405-19

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Arsenic	102.04	ND	109.87	108	75 - 125
Copper	102.04	1.6440	110.77	107	75 - 125

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Arsenic	102.04	108.02	106	1.70	20	75 - 125
Copper	102.04	111.87	108	0.980	20	75 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
 9210 Sky Park Court #200
 San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
 Project: Alameda
 Project Number: 5023146096
 Project Manager: Kevin Olness

LCS RECOVERY
EPA-6020

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
 Matrix: Water
 Batch: B[G2277] Laboratory ID: B[G2277-BS1]
 Preparation: EPA 3005A Initial/Final: 10 ml / 10 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Arsenic	100.00	98.213	98.2	75 - 125
Copper	100.00	109.20	109	75 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-6020

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713355</u>	Instrument:	<u>PE-EL2</u>
Matrix:	<u>Water</u>	Calibration:	<u>UNASSIGNED</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713355-ICV1	PE_EL2_170728-012	07/28/17 07:50
Initial Cal Blank	1713355-ICB1	PE_EL2_170728-014	07/28/17 08:04
MRL Check	1713355-CRL2	PE_EL2_170728-016	07/28/17 08:13
Calibration Check	1713355-CCV1	PE_EL2_170728-018	07/28/17 08:29
Calibration Blank	1713355-CCB1	PE_EL2_170728-019	07/28/17 08:32
Calibration Check	1713355-CCV2	PE_EL2_170728-027	07/28/17 09:00
Calibration Blank	1713355-CCB2	PE_EL2_170728-028	07/28/17 09:04
Interference Check A	1713355-IFA1	PE_EL2_170728-031	07/28/17 09:17
Interference Check B	1713355-IFB1	PE_EL2_170728-032	07/28/17 09:22
Calibration Check	1713355-CCV3	PE_EL2_170728-037	07/28/17 09:41
Calibration Blank	1713355-CCB3	PE_EL2_170728-038	07/28/17 09:44
LCS	B[G2277-BS1	PE_EL2_170728-039	07/28/17 09:52
Blank	B[G2277-BLK1	PE_EL2_170728-040	07/28/17 09:56
EB24_170725	1720405-19	PE_EL2_170728-041	07/28/17 09:59
EB24_170725	B[G2277-DUP1	PE_EL2_170728-042	07/28/17 10:02
EB24_170725	B[G2277-MS1	PE_EL2_170728-044	07/28/17 10:09
EB24_170725	B[G2277-MSD1	PE_EL2_170728-045	07/28/17 10:13
EB25_170725	1720405-20	PE_EL2_170728-046	07/28/17 10:16
EB26_170725	1720405-21	PE_EL2_170728-047	07/28/17 10:20
Calibration Check	1713355-CCV4	PE_EL2_170728-049	07/28/17 10:27
Calibration Blank	1713355-CCB4	PE_EL2_170728-050	07/28/17 10:30
28SW02_170725	1720405-07	PE_EL2_170728-051	07/28/17 10:34
28SW03_170725	1720405-08	PE_EL2_170728-052	07/28/17 10:37
28SW08_170725	1720405-09	PE_EL2_170728-053	07/28/17 10:41
Calibration Check	1713355-CCV5	PE_EL2_170728-056	07/28/17 10:51
Calibration Blank	1713355-CCB5	PE_EL2_170728-057	07/28/17 10:55



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BLANKS
EPA-6020

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Instrument ID: PE-EL2

Project: Alameda

Sequence: 1713355

Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	DL	LOD	LOQ	Units	C	Method
1713355-ICB1	Arsenic	0.53300	0.38		2.0	ug/L	J	EPA-6020
	Copper	0.019000	0.32		2.0	ug/L	U	EPA-6020
1713355-CCB1	Arsenic	0.30300	0.38		2.0	ug/L	U	EPA-6020
	Copper	0.035000	0.32		2.0	ug/L	U	EPA-6020
1713355-CCB2	Arsenic	0.057000	0.38		2.0	ug/L	U	EPA-6020
	Copper	0.0070000	0.32		2.0	ug/L	U	EPA-6020
1713355-CCB3	Arsenic	-0.15300	0.38		2.0	ug/L	U	EPA-6020
	Copper	0.026000	0.32		2.0	ug/L	U	EPA-6020
1713355-CCB4	Arsenic	0.26100	0.38		2.0	ug/L	U	EPA-6020
	Copper	0.019000	0.32		2.0	ug/L	U	EPA-6020
1713355-CCB5	Arsenic	-0.41200	0.38		2.0	ug/L	U	EPA-6020
	Copper	0.014000	0.32		2.0	ug/L	U	EPA-6020



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-6020

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Instrument ID: PE-EL2

Calibration: UNASSIGNED

Control Limit: +/- 10.00%

Sequence: 1713355

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713355-ICV1	Arsenic	125.00	131.47	105	ug/L	EPA-6020
	Copper	125.00	132.24	106	ug/L	EPA-6020
1713355-CCV1	Arsenic	100.00	96.276	96.3	ug/L	EPA-6020
	Copper	100.00	99.900	99.9	ug/L	EPA-6020
1713355-CCV2	Arsenic	100.00	99.606	99.6	ug/L	EPA-6020
	Copper	100.00	101.56	102	ug/L	EPA-6020
1713355-CCV3	Arsenic	100.00	98.484	98.5	ug/L	EPA-6020
	Copper	100.00	105.53	106	ug/L	EPA-6020
1713355-CCV4	Arsenic	100.00	99.679	99.7	ug/L	EPA-6020
	Copper	100.00	105.55	106	ug/L	EPA-6020
1713355-CCV5	Arsenic	100.00	100.16	100	ug/L	EPA-6020
	Copper	100.00	106.13	106	ug/L	EPA-6020

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ICP INTERFERENCE CHECK SAMPLE

EPA-6020

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMC

Project: Alameda

Instrument ID: PE-EL2

Calibration: UNASSIGNED

Sequence: 1713355

Lab Sample ID	Analyte	True	Found	%R	Units
1713355-IFA1	Arsenic		0.74400		ug/L
	Copper		6.1370	*	ug/L
1713355-IFB1	Arsenic	20.000	20.35	102	ug/L
	Copper	20.000	24.43	122 *	ug/L

* Values outside of QC limits



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument PE-EL2



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Samples

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: 1720405-07 @10

Sample Date/Time: Friday, July 28, 2017 10:34:30

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 110

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.000	-0.019	0.00	0.0	ug/L
	B	11		8129.658	232.455	15.93	6.9	ug/L
	Al	27		959.393	0.557	0.04	6.8	ug/L
>	Sc	45		110385.715				ug/L
	V	51		10077.523	13.862	0.80	5.8	ug/L
	Cr	52		1719.692	0.943	0.03	2.9	ug/L
	Cr	53		14775.346	35.095	2.99	8.5	ug/L
	Mn	55		7531.686	5.111	0.10	2.0	ug/L
	Co	59		87.334	0.042	0.01	18.8	ug/L
L	Ni	60		1060.073	5.619	0.26	4.6	ug/L
	Cu	63		5240.453	19.925	0.11	0.6	ug/L
	Cu	65		1834.552	14.969	0.34	2.3	ug/L
	Zn	66		1048.738	13.475	0.27	2.0	ug/L
	Zn	68		742.703	13.473	0.76	5.6	ug/L
>	Ge	72		70552.438				ug/L
	As	75		944.047	11.952	1.04	8.7	ug/L
	Se	77		830.712	48.015	0.71	1.5	ug/L
	Se	82		269.935	23.275	0.66	2.8	ug/L
L	Sr	88		824989.504	516.526	7.64	1.5	ug/L
	Mo	98		369.644	1.028	0.08	8.0	ug/L
>	Rh	103		78546.010				ug/L
L	Ag	107		10.667	0.011	0.01	105.2	ug/L
	Cd	111		16.483	0.086	0.05	58.3	ug/L
	Cd	114		68.587	0.138	0.01	10.2	ug/L
>	In	115		132176.230				ug/L
	Sn	120		287.271	0.221	0.13	58.1	ug/L
L	Sb	121		626.692	0.885	0.06	6.6	ug/L
	Ba	137		14342.017	37.568	0.78	2.1	ug/L
	Ba	138		90010.475	37.507	0.23	0.6	ug/L
>	Tb	159		210672.814				ug/L
	Tl	205		31.667	-0.004	0.00	47.6	ug/L
L	Pb	208		70.000	0.031	0.01	18.9	ug/L
	Hg	200		26.911	0.205	0.06	30.5	ug/L
	Hg	201		13.333	0.205	0.08	36.9	ug/L
>	Bi	209		121806.259				ug/L
L	U	238		2084.950	0.467	0.01	2.3	ug/L
	C	13		260.004				ug/L
	W	184		66.000				ug/L
	Pd	106		-0.945				ug/L
	Kr	83		8.000				ug/L
	Na	23		300750311.212	556429.724	44046.69	7.9	ug/L
	Mg	24		22161564.880	67175.071	4677.75	7.0	ug/L

	K	39	7922929.986	18380.183	228.92	1.2	ug/L
	Ca	44	447828.702	29604.669	424.88	1.4	ug/L
	Ti	47	86.667				ug/L
L	Sc-1	45	110385.715				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		99.971
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		70.405
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		71.173
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		79.731
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		85.305
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		63.612
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: 1720405-08 @10

Sample Date/Time: Friday, July 28, 2017 10:37:57

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 111

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.667	0.018	0.06	354.1	ug/L
	B	11		11248.274	328.256	23.51	7.2	ug/L
	Al	27		910.721	0.485	0.16	33.2	ug/L
>	Sc	45		109072.978				ug/L
	V	51		1131.509	3.633	0.82	22.7	ug/L
	Cr	52		1800.378	1.071	0.11	10.2	ug/L
	Cr	53		14759.148	36.881	5.94	16.1	ug/L
	Mn	55		7694.522	5.285	0.21	4.0	ug/L
	Co	59		65.334	0.018	0.01	71.9	ug/L
L	Ni	60		763.705	4.052	0.08	2.0	ug/L
	Cu	63		2854.530	10.773	0.14	1.3	ug/L
	Cu	65		799.375	6.455	0.51	7.9	ug/L
	Zn	66		425.345	5.258	0.24	4.6	ug/L
	Zn	68		277.005	4.827	0.55	11.5	ug/L
>	Ge	72		70946.955				ug/L
	As	75		695.147	8.782	0.41	4.6	ug/L
	Se	77		805.376	44.093	1.90	4.3	ug/L
	Se	82		264.618	22.676	1.86	8.2	ug/L
L	Sr	88		516143.483	318.546	2.93	0.9	ug/L
	Mo	98		467.832	1.311	0.04	2.9	ug/L
>	Rh	103		78133.967				ug/L
L	Ag	107		10.000	0.010	0.00	33.8	ug/L
	Cd	111		-2.329	-0.009	0.05	586.5	ug/L
	Cd	114		15.840	0.027	0.01	22.4	ug/L
>	In	115		130840.574				ug/L
	Sn	120		189.994	0.114	0.09	78.8	ug/L
L	Sb	121		105.334	0.026	0.02	82.6	ug/L
	Ba	137		8226.042	21.666	0.22	1.0	ug/L
	Ba	138		51275.828	21.478	0.28	1.3	ug/L
>	Tb	159		209395.923				ug/L
	Tl	205		17.333	-0.009	0.00	8.5	ug/L
L	Pb	208		105.667	0.050	0.00	3.6	ug/L
	Hg	200		9.746	0.044	0.05	109.8	ug/L
	Hg	201		11.333	0.176	0.01	4.0	ug/L
>	Bi	209		119275.999				ug/L
L	U	238		1655.512	0.378	0.01	1.5	ug/L
	C	13		226.670				ug/L
	W	184		248.004				ug/L
	Pd	106		0.682				ug/L
	Kr	83		6.167				ug/L
	Na	23		S	S	S	S	ug/L
	Mg	24		20227515.268	61312.627	4736.48	7.7	ug/L

K	39	8711642.764	20216.719	412.58	2.0	ug/L
Ca	44	175264.261	11579.240	106.94	0.9	ug/L
Ti	47	70.000				ug/L
Sc-1	45	109072.978				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
> Sc	45		98.782
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
> Ge	72		70.799
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
> Rh	103		70.800
Ag	107		
Cd	111		
Cd	114		
> In	115		78.925
Sn	120		
Sb	121		
Ba	137		
Ba	138		
> Tb	159		84.788
Tl	205		
Pb	208		
Hg	200		
Hg	201		
> Bi	209		62.290
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: 1720405-09 @10

Sample Date/Time: Friday, July 28, 2017 10:41:25

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 112

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		1.333	0.061	0.07	113.6	ug/L
	B	11		12535.624	385.888	34.07	8.8	ug/L
	Al	27		943.391	0.642	0.04	6.3	ug/L
>	Sc	45		103711.407				ug/L
	V	51		830.617	3.344	0.49	14.6	ug/L
	Cr	52		1704.856	1.063	0.05	4.3	ug/L
	Cr	53		14805.410	45.646	1.35	3.0	ug/L
	Mn	55		167.335	-0.043	0.01	22.5	ug/L
	Co	59		81.667	0.042	0.01	16.8	ug/L
L	Ni	60		1091.411	6.171	0.22	3.5	ug/L
	Cu	63		2850.195	12.817	0.21	1.7	ug/L
	Cu	65		525.685	5.057	0.10	2.0	ug/L
	Zn	66		643.360	9.701	0.69	7.1	ug/L
	Zn	68		373.009	7.916	1.01	12.8	ug/L
>	Ge	72		59581.889				ug/L
	As	75		1063.971	15.929	2.16	13.6	ug/L
	Se	77		861.882	72.915	1.65	2.3	ug/L
	Se	82		430.232	44.611	1.89	4.2	ug/L
L	Sr	88		1115164.276	830.803	3.60	0.4	ug/L
	Mo	98		446.424	1.452	0.03	2.1	ug/L
>	Rh	103		67496.857				ug/L
L	Ag	107		25.333	0.036	0.01	40.3	ug/L
	Cd	111		14.397	0.086	0.07	82.5	ug/L
	Cd	114		65.293	0.151	0.07	44.6	ug/L
>	In	115		115393.733				ug/L
	Sn	120		176.610	0.123	0.09	72.1	ug/L
L	Sb	121		415.345	0.636	0.01	2.4	ug/L
	Ba	137		3886.968	11.249	0.13	1.1	ug/L
	Ba	138		24355.151	11.209	0.17	1.5	ug/L
>	Tb	159		190333.496				ug/L
	Tl	205		14.333	-0.010	0.00	5.3	ug/L
L	Pb	208		14.333	0.004	0.00	46.2	ug/L
	Hg	200		27.180	0.261	0.18	67.0	ug/L
	Hg	201		16.667	0.319	0.05	14.9	ug/L
>	Bi	209		101822.601				ug/L
L	U	238		931.723	0.248	0.00	1.0	ug/L
	C	13		240.005				ug/L
	W	184		24.000				ug/L
	Pd	106		0.063				ug/L
	Kr	83		13.167				ug/L
	Na	23		S	S	S	S	ug/L
	Mg	24		35063345.470	106282.634	6667.39	6.3	ug/L

	K	39	14998612.079	34856.073	798.23	2.3	ug/L
	Ca	44	529883.622	35031.184	679.56	1.9	ug/L
	Ti	47	100.001				ug/L
L	Sc-1	45	103711.407				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		93.927
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		59.457
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		61.161
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		69.607
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		77.069
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		53.175
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

Ti 47

Sc-1 45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ge 72 Int Std for sample	Ge	72	IS limits for 6020 are 30%-120% & for 200.8 IS limits are 60%-125%
Bi 209 Int Std for sample	Bi	209	IS limits for 6020 are 30%-120% & for 200.8 IS limits are 60%-125%

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: 1720405-19

Sample Date/Time: Friday, July 28, 2017 09:59:29

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 103

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.667	0.020	0.07	337.8	ug/L
	B	11		271.338	1.833	0.45	24.7	ug/L
	Al	27		608.692	-0.031	0.35	1128.8	ug/L
>	Sc	45		103087.489				ug/L
	V	51		-1050.836	1.052	0.15	14.6	ug/L
	Cr	52		887.218	-0.028	0.01	20.9	ug/L
	Cr	53		4177.801	-76.427	1.52	2.0	ug/L
	Mn	55		210.670	-0.010	0.02	204.8	ug/L
	Co	59		17.667	-0.034	0.00	11.1	ug/L
L	Ni	60		35.333	0.047	0.09	201.1	ug/L
	Cu	63		616.691	1.636	0.13	8.1	ug/L
	Cu	65		287.672	1.644	0.04	2.4	ug/L
	Zn	66		1982.589	18.239	0.85	4.7	ug/L
	Zn	68		1417.464	18.399	0.39	2.1	ug/L
>	Ge	72		99144.055				ug/L
	As	75		-42.418	-0.305	0.56	184.5	ug/L
	Se	77		232.170	-39.329	1.41	3.6	ug/L
	Se	82		4.955	-0.451	0.31	68.3	ug/L
L	Sr	88		16363.059	0.120	0.13	110.5	ug/L
	Mo	98		26.968	0.030	0.03	92.4	ug/L
>	Rh	103		109310.647				ug/L
L	Ag	107		10.000	0.006	0.00	64.1	ug/L
	Cd	111		3.213	0.016	0.00	32.1	ug/L
	Cd	114		5.427	0.001	0.01	514.7	ug/L
>	In	115		169448.174				ug/L
	Sn	120		220.003	0.089	0.01	16.4	ug/L
L	Sb	121		48.667	-0.086	0.01	9.9	ug/L
	Ba	137		127.653	0.252	0.03	11.8	ug/L
	Ba	138		784.692	0.244	0.02	6.6	ug/L
>	Tb	159		245402.435				ug/L
	Tl	205		26.000	-0.007	0.00	20.6	ug/L
L	Pb	208		45.333	0.016	0.00	22.1	ug/L
	Hg	200		11.940	0.019	0.02	104.5	ug/L
	Hg	201		5.333	0.036	0.01	34.4	ug/L
>	Bi	209		193333.238				ug/L
L	U	238		31.333	0.001	0.00	217.8	ug/L
	C	13		213.336				ug/L
	W	184		9.333				ug/L
	Pd	106		3.268				ug/L
	Kr	83		5.167				ug/L
	Na	23		104292.333	183.865	16.63	9.0	ug/L
	Mg	24		893.387	2.183	0.56	25.8	ug/L

	K	39	28773.760	-1.543	2.38	154.3	ug/L
	Ca	44	563.354	25.793	2.13	8.2	ug/L
	Ti	47	3.333				ug/L
L	Sc-1	45	103087.489				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		93.362
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		98.937
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		99.050
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		102.214
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		99.368
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		100.966
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: 1720405-20

Sample Date/Time: Friday, July 28, 2017 10:16:46

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 108

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.000	-0.019	0.00	0.0	ug/L
	B	11		448.013	6.705	1.81	27.0	ug/L
	Al	27		1157.421	0.976	0.24	25.1	ug/L
>	Sc	45		108256.360				ug/L
	V	51		-1126.121	1.028	0.07	6.5	ug/L
	Cr	52		884.884	-0.087	0.05	58.8	ug/L
	Cr	53		4570.025	-74.453	0.83	1.1	ug/L
	Mn	55		214.670	-0.014	0.01	103.2	ug/L
	Co	59		19.667	-0.033	0.00	5.7	ug/L
L	Ni	60		33.667	0.026	0.03	111.1	ug/L
	Cu	63		108.334	0.267	0.04	15.7	ug/L
	Cu	65		53.334	0.293	0.07	23.1	ug/L
	Zn	66		2319.350	22.226	0.58	2.6	ug/L
	Zn	68		1638.508	22.165	0.57	2.6	ug/L
>	Ge	72		95402.389				ug/L
	As	75		-9.715	-0.026	0.67	2530.6	ug/L
	Se	77		246.504	-37.070	1.86	5.0	ug/L
	Se	82		10.458	-0.081	0.23	283.2	ug/L
L	Sr	88		15741.431	0.117	0.11	92.3	ug/L
	Mo	98		182.116	0.364	0.15	40.9	ug/L
>	Rh	103		104302.373				ug/L
L	Ag	107		12.000	0.008	0.01	64.3	ug/L
	Cd	111		2.461	0.013	0.01	105.2	ug/L
	Cd	114		2.577	-0.003	0.00	98.1	ug/L
>	In	115		164321.102				ug/L
	Sn	120		846.716	0.665	0.23	34.3	ug/L
L	Sb	121		126.668	0.019	0.06	322.3	ug/L
	Ba	137		74.972	0.141	0.01	9.3	ug/L
	Ba	138		440.651	0.128	0.01	4.6	ug/L
>	Tb	159		234656.907				ug/L
	Tl	205		112.001	0.022	0.00	12.0	ug/L
L	Pb	208		130.334	0.055	0.01	14.7	ug/L
	Hg	200		21.291	0.081	0.05	55.6	ug/L
	Hg	201		19.333	0.193	0.13	68.8	ug/L
>	Bi	209		186825.287				ug/L
L	U	238		284.339	0.038	0.02	51.3	ug/L
	C	13		253.338				ug/L
	W	184		6.667				ug/L
	Pd	106		0.406				ug/L
	Kr	83		4.833				ug/L
	Na	23		15375.454	19.354	2.85	14.7	ug/L
	Mg	24		680.030	1.536	0.26	17.2	ug/L

	K	39	36915.061	17.415	1.92	11.0	ug/L
	Ca	44	410.011	15.652	4.34	27.7	ug/L
	Ti	47	26.667				ug/L
L	Sc-1	45	108256.360				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		98.043
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		95.203
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		94.512
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		99.121
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		95.017
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		97.567
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: 1720405-21

Sample Date/Time: Friday, July 28, 2017 10:20:14

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 109

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.000	-0.019	0.00	0.0	ug/L
	B	11		312.006	2.861	0.64	22.5	ug/L
	Al	27		546.686	-0.191	0.06	32.5	ug/L
>	Sc	45		105819.071				ug/L
	V	51		-1114.128	1.005	0.41	40.3	ug/L
	Cr	52		889.551	-0.055	0.02	35.3	ug/L
	Cr	53		4381.748	-75.347	2.28	3.0	ug/L
	Mn	55		170.002	-0.044	0.01	31.9	ug/L
	Co	59		20.667	-0.031	0.00	13.0	ug/L
L	Ni	60		30.000	0.008	0.04	447.4	ug/L
	Cu	63		611.691	1.651	0.03	1.8	ug/L
	Cu	65		275.338	1.602	0.09	5.3	ug/L
	Zn	66		2032.602	19.048	0.58	3.0	ug/L
	Zn	68		1406.795	18.610	0.51	2.7	ug/L
>	Ge	72		97341.826				ug/L
	As	75		12.362	0.173	0.65	373.9	ug/L
	Se	77		240.670	-38.102	1.22	3.2	ug/L
	Se	82		7.119	-0.312	0.29	92.4	ug/L
L	Sr	88		16200.043	0.182	0.03	17.8	ug/L
	Mo	98		44.927	0.067	0.04	61.3	ug/L
>	Rh	103		108233.557				ug/L
L	Ag	107		4.000	0.000	0.00	3489.1	ug/L
	Cd	111		-0.206	0.002	0.01	341.0	ug/L
	Cd	114		8.226	0.006	0.01	166.4	ug/L
>	In	115		168386.395				ug/L
	Sn	120		503.333	0.342	0.10	29.4	ug/L
L	Sb	121		62.667	-0.068	0.04	52.8	ug/L
	Ba	137		94.319	0.181	0.02	9.0	ug/L
	Ba	138		564.673	0.169	0.01	6.0	ug/L
>	Tb	159		240863.043				ug/L
	Tl	205		35.667	-0.004	0.00	37.2	ug/L
L	Pb	208		34.333	0.011	0.00	39.3	ug/L
	Hg	200		15.974	0.045	0.02	42.9	ug/L
	Hg	201		8.000	0.065	0.04	66.5	ug/L
>	Bi	209		191136.516				ug/L
L	U	238		87.001	0.009	0.01	85.9	ug/L
	C	13		233.337				ug/L
	W	184		4.000				ug/L
	Pd	106		0.667				ug/L
	Kr	83		5.500				ug/L
	Na	23		112950.019	199.883	23.46	11.7	ug/L
	Mg	24		913.388	2.243	0.36	16.2	ug/L

	K	39	28746.981	-1.605	2.04	127.0	ug/L
	Ca	44	593.356	27.777	3.88	14.0	ug/L
	Ti	47	6.667				ug/L
L	Sc-1	45	105819.071				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		95.835
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		97.138
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		98.074
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		101.573
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		97.530
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		99.818
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Calibration Standards

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Blank

Sample Date/Time: Friday, July 28, 2017 07:25:53

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1100

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 1

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.333				ug/L
	B	11		174.669				ug/L
	Al	27		842.046				ug/L
>	Sc	45		106492.673				ug/L
	V	51		-1319.635				ug/L
	Cr	52		1024.402				ug/L
	Cr	53		11391.596				ug/L
	Mn	55		138.001				ug/L
	Co	59		36.667				ug/L
	Ni	60		26.667				ug/L
	Cu	63		14.667				ug/L
	Cu	65		2.333				ug/L
	Zn	66		26.667				ug/L
	Zn	68		25.000				ug/L
>	Ge	72		93986.205				ug/L
	As	75		-18.274				ug/L
	Se	77		656.695				ug/L
	Se	82		16.087				ug/L
	Sr	88		15268.475				ug/L
	Mo	98		23.082				ug/L
>	Rh	103		104012.504				ug/L
	Ag	107		5.333				ug/L
	Cd	111		-0.667				ug/L
	Cd	114		3.747				ug/L
>	In	115		156598.304				ug/L
	Sn	120		109.326				ug/L
	Sb	121		275.338				ug/L
	Ba	137		10.317				ug/L
	Ba	138		67.984				ug/L
>	Tb	159		232587.351				ug/L
	Tl	205		134.335				ug/L
	Pb	208		12.000				ug/L
	Hg	200		0.615				ug/L
	Hg	201		1.333				ug/L
>	Bi	209		178154.005				ug/L
	U	238		10.667				ug/L
	C	13		166.669				ug/L
	W	184		8.000				ug/L
	Pd	106		1.935				ug/L
	Kr	83		9.167				ug/L
	Na	23		6783.006				ug/L
	Mg	24		160.002				ug/L

	K	39	31196.495	ug/L
	Ca	44	143.335	ug/L
	Ti	47	0.000	ug/L
L	Sc-1	45	106492.673	ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000000	0.000	0.000000	Linear Thru Zero
B	11.009	0.000000	0.000	0.000000	Linear Thru Zero
Al	26.982	0.000000	0.000	0.000000	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.000000	0.000	0.000000	Linear Thru Zero
Cr	51.941	0.000000	0.000	0.000000	Linear Thru Zero
Cr	52.941	0.000000	0.000	0.000000	Linear Thru Zero
Mn	54.938	0.000000	0.000	0.000000	Linear Thru Zero
Co	58.933	0.000000	0.000	0.000000	Linear Thru Zero
Ni	59.933	0.000000	0.000	0.000000	Linear Thru Zero
Cu	62.930	0.000000	0.000	0.000000	Linear Thru Zero
Cu	64.928	0.000000	0.000	0.000000	Linear Thru Zero
Zn	65.926	0.000000	0.000	0.000000	Linear Thru Zero
Zn	67.925	0.000000	0.000	0.000000	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.000000	0.000	0.000000	Linear Thru Zero
Se	76.920	0.000000	0.000	0.000000	Linear Thru Zero
Se	81.917	0.000000	0.000	0.000000	Linear Thru Zero
Sr	87.906	0.000000	0.000	0.000000	Linear Thru Zero
Mo	97.906	0.000000	0.000	0.000000	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.000000	0.000	0.000000	Linear Thru Zero
Cd	110.904	0.000000	0.000	0.000000	Linear Thru Zero
Cd	113.904	0.000000	0.000	0.000000	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.000000	0.000	0.000000	Linear Thru Zero
Sb	120.904	0.000000	0.000	0.000000	Linear Thru Zero
Ba	136.905	0.000000	0.000	0.000000	Linear Thru Zero
Ba	137.905	0.000000	0.000	0.000000	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.000000	0.000	0.000000	Linear Thru Zero
Pb	207.977	0.000000	0.000	0.000000	Linear Thru Zero
Hg	199.968	0.000000	0.000	0.000000	Linear Thru Zero
Hg	200.970	0.000000	0.000	0.000000	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.000000	0.000	0.000000	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	0.000000	0.000	0.000000	Linear Thru Zero
Mg	23.985	0.000000	0.000	0.000000	Linear Thru Zero
K	38.964	0.000000	0.000	0.000000	Linear Thru Zero
Ca	43.956	0.000000	0.000	0.000000	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Standard 1

Sample Date/Time: Friday, July 28, 2017 07:29:21

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1100

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 2

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9	21.333		1.000	0.13	12.8	ug/L
	B	11	928.723		20.000	2.32	11.6	ug/L
	Al	27	12049.464		20.000	1.01	5.1	ug/L
>	Sc	45	107343.443					ug/L
	V	51	682.268		3.000	0.15	5.0	ug/L
	Cr	52	3437.101		3.000	0.03	1.0	ug/L
	Cr	53	12071.798		3.000	1.73	57.6	ug/L
	Mn	55	1609.502		1.000	0.05	5.1	ug/L
	Co	59	922.722		1.000	0.04	3.6	ug/L
L	Ni	60	387.010		1.000	0.04	3.9	ug/L
	Cu	63	794.041		2.000	0.08	4.1	ug/L
	Cu	65	387.010		2.000	0.09	4.5	ug/L
	Zn	66	585.356		5.000	0.13	2.6	ug/L
	Zn	68	394.010		5.000	0.31	6.2	ug/L
>	Ge	72	94608.017					ug/L
	As	75	264.609		2.000	0.22	10.8	ug/L
	Se	77	674.030		2.000	0.35	17.5	ug/L
	Se	82	45.432		2.000	0.16	8.0	ug/L
L	Sr	88	15834.615		0.200	0.07	34.1	ug/L
	Mo	98	494.354		1.000	0.02	2.3	ug/L
>	Rh	103	105491.158					ug/L
L	Ag	107	1022.068		1.000	0.04	3.5	ug/L
	Cd	111	235.051		1.000	0.03	2.6	ug/L
	Cd	114	543.257		1.000	0.07	7.1	ug/L
>	In	115	156884.234					ug/L
	Sn	120	1181.399		1.000	0.04	4.4	ug/L
L	Sb	121	1616.837		2.000	0.06	3.1	ug/L
	Ba	137	434.668		1.000	0.08	7.9	ug/L
	Ba	138	2847.183		1.000	0.02	1.5	ug/L
>	Tb	159	232084.747					ug/L
	Tl	205	3341.392		1.000	0.01	1.3	ug/L
L	Pb	208	2348.692		1.000	0.01	0.9	ug/L
	Hg	200	51.932		0.200	0.06	27.7	ug/L
	Hg	201	27.333		0.200	0.05	24.2	ug/L
>	Bi	209	176937.861					ug/L
L	U	238	6296.910		1.000	0.01	1.0	ug/L
	C	13	186.669					ug/L
	W	184	10.667					ug/L
	Pd	106	4.742					ug/L
	Kr	83	7.833					ug/L
	Na	23	63710.225		100.000	7.65	7.7	ug/L
	Mg	24	36818.125		100.000	6.21	6.2	ug/L

K	39	80027.646	100.000	4.20	4.2	ug/L
Ca	44	1836.886	100.000	5.74	5.7	ug/L
Ti	47	16.667				ug/L
Sc-1	45	107343.443				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
Sc	45		
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
Ge	72		
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
Rh	103		
Ag	107		
Cd	111		
Cd	114		
In	115		
Sn	120		
Sb	121		
Ba	137		
Ba	138		
Tb	159		
Tl	205		
Pb	208		
Hg	200		
Hg	201		
Bi	209		
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

Ti 47

Sc-1 45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000195	0.000	1.000000	Linear Thru Zero
B	11.009	0.000350	0.000	1.000000	Linear Thru Zero
Al	26.982	0.005213	0.000	1.000000	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.006250	0.000	1.000000	Linear Thru Zero
Cr	51.941	0.007468	0.000	1.000000	Linear Thru Zero
Cr	52.941	0.001848	0.000	1.000000	Linear Thru Zero
Mn	54.938	0.013686	0.000	1.000000	Linear Thru Zero
Co	58.933	0.008253	0.000	1.000000	Linear Thru Zero
Ni	59.933	0.003356	0.000	1.000000	Linear Thru Zero
Cu	62.930	0.004119	0.000	1.000000	Linear Thru Zero
Cu	64.928	0.002033	0.000	1.000000	Linear Thru Zero
Zn	65.926	0.001181	0.000	1.000000	Linear Thru Zero
Zn	67.925	0.000779	0.000	1.000000	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001497	0.000	1.000000	Linear Thru Zero
Se	76.920	0.000069	0.000	1.000000	Linear Thru Zero
Se	81.917	0.000155	0.000	1.000000	Linear Thru Zero
Sr	87.906	0.024673	0.000	1.000000	Linear Thru Zero
Mo	97.906	0.004465	0.000	1.000000	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009638	0.000	1.000000	Linear Thru Zero
Cd	110.904	0.001502	0.000	1.000000	Linear Thru Zero
Cd	113.904	0.003438	0.000	1.000000	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006832	0.000	1.000000	Linear Thru Zero
Sb	120.904	0.004274	0.000	1.000000	Linear Thru Zero
Ba	136.905	0.001830	0.000	1.000000	Linear Thru Zero
Ba	137.905	0.011976	0.000	1.000000	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.013819	0.000	1.000000	Linear Thru Zero
Pb	207.977	0.010069	0.000	1.000000	Linear Thru Zero
Hg	199.968	0.001451	0.000	1.000000	Linear Thru Zero
Hg	200.970	0.000734	0.000	1.000000	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.035527	0.000	1.000000	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	569.272192	0.000	1.000000	Linear Thru Zero
Mg	23.985	366.581228	0.000	1.000000	Linear Thru Zero
K	38.964	488.311515	0.000	1.000000	Linear Thru Zero
Ca	43.956	16.935517	0.000	1.000000	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Standard 2

Sample Date/Time: Friday, July 28, 2017 07:32:49

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1100

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 3

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9	163.002		9.977	2.13	21.4	ug/L
	B	11	3332.730		99.484	10.07	10.1	ug/L
	Al	27	14527.738		25.261	0.74	2.9	ug/L
>	Sc	45	102423.224					ug/L
	V	51	6658.187		10.162	0.52	5.2	ug/L
	Cr	52	8475.167		9.983	0.24	2.4	ug/L
	Cr	53	11142.899		5.783	8.09	139.8	ug/L
	Mn	55	33243.027		24.998	0.37	1.5	ug/L
	Co	59	8469.661		10.000	0.20	2.0	ug/L
L	Ni	60	4422.271		24.962	0.64	2.6	ug/L
	Cu	63	9072.348		24.990	0.27	1.1	ug/L
	Cu	65	4227.829		24.981	0.47	1.9	ug/L
	Zn	66	2702.142		24.971	0.71	2.9	ug/L
	Zn	68	1956.582		25.057	0.40	1.6	ug/L
>	Ge	72	93316.971					ug/L
	As	75	2574.527		24.945	0.24	1.0	ug/L
	Se	77	873.383		25.044	1.25	5.0	ug/L
	Se	82	369.270		24.997	1.22	4.9	ug/L
L	Sr	88	19217.313		1.997	0.09	4.5	ug/L
	Mo	98	4552.498		9.998	0.07	0.7	ug/L
>	Rh	103	103928.032					ug/L
L	Ag	107	9741.499		9.997	0.14	1.4	ug/L
	Cd	111	2370.508		10.002	0.37	3.7	ug/L
	Cd	114	5480.370		10.003	0.22	2.2	ug/L
>	In	115	154749.978					ug/L
	Sn	120	10433.721		9.998	0.11	1.1	ug/L
L	Sb	121	7386.212		10.027	0.29	2.9	ug/L
	Ba	137	4381.209		10.001	0.14	1.4	ug/L
	Ba	138	26674.131		9.994	0.03	0.3	ug/L
>	Tb	159	235487.608					ug/L
	Tl	205	30672.060		9.993	0.22	2.2	ug/L
L	Pb	208	56126.407		24.998	0.37	1.5	ug/L
	Hg	200	308.596		1.987	0.15	7.5	ug/L
	Hg	201	144.001		1.984	0.48	24.3	ug/L
>	Bi	209	178517.794					ug/L
L	U	238	60841.718		9.996	0.10	1.0	ug/L
	C	13	153.335					ug/L
	W	184	11.999					ug/L
	Pd	106	-5.623					ug/L
	Kr	83	8.333					ug/L
	Na	23	490262.411		998.246	77.16	7.7	ug/L
	Mg	24	324835.129		998.724	81.14	8.1	ug/L

K	39	463697.476	998.724	22.39	2.2	ug/L
Ca	44	15492.259	998.978	26.13	2.6	ug/L
Ti	47	10.000				ug/L
Sc-1	45	102423.224				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
> Sc	45		
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
> Ge	72		
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
> Rh	103		
Ag	107		
Cd	111		
Cd	114		
> In	115		
Sn	120		
Sb	121		
Ba	137		
Ba	138		
> Tb	159		
Tl	205		
Pb	208		
Hg	200		
Hg	201		
> Bi	209		
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000158	0.000	0.999731	Linear Thru Zero
B	11.009	0.000310	0.000	0.999667	Linear Thru Zero
Al	26.982	0.005299	0.000	0.999915	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007623	0.000	0.998543	Linear Thru Zero
Cr	51.941	0.007329	0.000	0.999984	Linear Thru Zero
Cr	52.941	0.000325	0.000	0.579706	Linear Thru Zero
Mn	54.938	0.012936	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008238	0.000	1.000000	Linear Thru Zero
Ni	59.933	0.001720	0.000	0.999278	Linear Thru Zero
Cu	62.930	0.003884	0.000	0.999988	Linear Thru Zero
Cu	64.928	0.001813	0.000	0.999953	Linear Thru Zero
Zn	65.926	0.001148	0.000	0.999984	Linear Thru Zero
Zn	67.925	0.000826	0.000	0.999935	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001114	0.000	0.999621	Linear Thru Zero
Se	76.920	0.000095	0.000	0.999759	Linear Thru Zero
Se	81.917	0.000152	0.000	0.999999	Linear Thru Zero
Sr	87.906	0.021765	0.000	0.999911	Linear Thru Zero
Mo	97.906	0.004359	0.000	0.999997	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009371	0.000	0.999996	Linear Thru Zero
Cd	110.904	0.001532	0.000	0.999998	Linear Thru Zero
Cd	113.904	0.003538	0.000	0.999996	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006674	0.000	0.999997	Linear Thru Zero
Sb	120.904	0.004585	0.000	0.999908	Linear Thru Zero
Ba	136.905	0.001856	0.000	0.999999	Linear Thru Zero
Ba	137.905	0.011305	0.000	0.999982	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012975	0.000	0.999979	Linear Thru Zero
Pb	207.977	0.009532	0.000	0.999997	Linear Thru Zero
Hg	199.968	0.000869	0.000	0.997759	Linear Thru Zero
Hg	200.970	0.000403	0.000	0.996649	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.034088	0.000	0.999991	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	484.328839	0.000	0.999846	Linear Thru Zero
Mg	23.985	325.090039	0.000	0.999919	Linear Thru Zero
K	38.964	433.053561	0.000	0.999919	Linear Thru Zero
Ca	43.956	15.364633	0.000	0.999948	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Standard 3

Sample Date/Time: Friday, July 28, 2017 07:36:17

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1100

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 4

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		325.674	20.038	2.96	14.8	ug/L
	B	11		6486.747	200.180	11.95	6.0	ug/L
	Al	27		26444.102	49.307	1.03	2.1	ug/L
>	Sc	45		101430.675				ug/L
	V	51		13648.167	19.841	0.07	0.4	ug/L
	Cr	52		15663.766	19.949	0.33	1.7	ug/L
	Cr	53		12286.474	22.632	7.20	31.8	ug/L
	Mn	55		65817.132	50.013	0.25	0.5	ug/L
	Co	59		16777.611	20.009	0.44	2.2	ug/L
L	Ni	60		8577.781	49.802	1.29	2.6	ug/L
	Cu	63		18072.540	50.020	0.32	0.6	ug/L
	Cu	65		8374.557	49.954	1.07	2.1	ug/L
	Zn	66		5191.419	49.677	1.39	2.8	ug/L
	Zn	68		3752.582	49.707	0.74	1.5	ug/L
>	Ge	72		92806.242				ug/L
	As	75		5344.930	50.366	1.00	2.0	ug/L
	Se	77		1154.753	51.365	2.04	4.0	ug/L
	Se	82		772.964	50.725	1.51	3.0	ug/L
L	Sr	88		23384.508	4.022	0.17	4.2	ug/L
	Mo	98		8869.785	19.956	0.24	1.2	ug/L
>	Rh	103		102558.578				ug/L
L	Ag	107		19318.896	20.020	0.24	1.2	ug/L
	Cd	111		4672.388	19.942	0.29	1.5	ug/L
	Cd	114		10798.362	19.943	0.13	0.7	ug/L
>	In	115		154708.541				ug/L
	Sn	120		20556.740	19.960	0.28	1.4	ug/L
L	Sb	121		14044.811	19.877	0.37	1.9	ug/L
	Ba	137		8491.287	19.907	0.42	2.1	ug/L
	Ba	138		52921.361	20.000	0.26	1.3	ug/L
>	Tb	159		233794.344				ug/L
	Tl	205		60333.688	19.969	0.29	1.5	ug/L
L	Pb	208		111033.687	49.964	0.29	0.6	ug/L
	Hg	200		607.315	3.995	0.14	3.4	ug/L
	Hg	201		330.674	4.115	0.32	7.8	ug/L
>	Bi	209		175704.919				ug/L
L	U	238		121246.876	20.048	0.15	0.7	ug/L
	C	13		173.335				ug/L
	W	184		6.666				ug/L
	Pd	106		1.159				ug/L
	Kr	83		8.667				ug/L
	Na	23		984029.095	2003.550	114.76	5.7	ug/L
	Mg	24		648684.304	1998.971	131.40	6.6	ug/L

	K	39	901407.493	2001.903	19.32	1.0	ug/L
	Ca	44	31116.179	2003.176	61.24	3.1	ug/L
	Ti	47	3.333				ug/L
L	Sc-1	45	101430.675				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000160	0.000	0.999939	Linear Thru Zero
B	11.009	0.000311	0.000	0.999930	Linear Thru Zero
Al	26.982	0.005126	0.000	0.999739	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007406	0.000	0.999553	Linear Thru Zero
Cr	51.941	0.007261	0.000	0.999985	Linear Thru Zero
Cr	52.941	0.000629	0.000	0.921873	Linear Thru Zero
Mn	54.938	0.012950	0.000	0.999999	Linear Thru Zero
Co	58.933	0.008253	0.000	1.000000	Linear Thru Zero
Ni	59.933	0.001694	0.000	0.999820	Linear Thru Zero
Cu	62.930	0.003890	0.000	0.999997	Linear Thru Zero
Cu	64.928	0.001806	0.000	0.999989	Linear Thru Zero
Zn	65.926	0.001120	0.000	0.999916	Linear Thru Zero
Zn	67.925	0.000808	0.000	0.999920	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001147	0.000	0.999822	Linear Thru Zero
Se	76.920	0.000106	0.000	0.998484	Linear Thru Zero
Se	81.917	0.000161	0.000	0.999582	Linear Thru Zero
Sr	87.906	0.022251	0.000	0.999923	Linear Thru Zero
Mo	97.906	0.004322	0.000	0.999990	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009407	0.000	0.999997	Linear Thru Zero
Cd	110.904	0.001514	0.000	0.999983	Linear Thru Zero
Cd	113.904	0.003499	0.000	0.999983	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006622	0.000	0.999992	Linear Thru Zero
Sb	120.904	0.004479	0.000	0.999907	Linear Thru Zero
Ba	136.905	0.001822	0.000	0.999957	Linear Thru Zero
Ba	137.905	0.011305	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012896	0.000	0.999991	Linear Thru Zero
Pb	207.977	0.009505	0.000	0.999998	Linear Thru Zero
Hg	199.968	0.000865	0.000	0.999540	Linear Thru Zero
Hg	200.970	0.000455	0.000	0.997825	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.034417	0.000	0.999987	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	487.757346	0.000	0.999963	Linear Thru Zero
Mg	23.985	324.429051	0.000	0.999983	Linear Thru Zero
K	38.964	434.691835	0.000	0.999982	Linear Thru Zero
Ca	43.956	15.461870	0.000	0.999985	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Standard 4

Sample Date/Time: Friday, July 28, 2017 07:39:45

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1100

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 5

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9	668.363		39.952	2.79	7.0	ug/L
	B	11	13410.440		401.158	30.04	7.5	ug/L
	Al	27	51852.723		98.579	3.37	3.4	ug/L
>	Sc	45	104967.895					ug/L
	V	51	31435.196		40.484	1.08	2.7	ug/L
	Cr	52	30535.003		39.691	0.58	1.5	ug/L
	Cr	53	15546.530		44.154	3.21	7.3	ug/L
	Mn	55	131796.220		99.248	2.67	2.7	ug/L
	Co	59	33306.957		39.614	1.09	2.8	ug/L
L	Ni	60	16953.330		98.829	2.27	2.3	ug/L
	Cu	63	35161.529		99.685	1.28	1.3	ug/L
	Cu	65	16430.199		99.845	0.41	0.4	ug/L
	Zn	66	10048.561		99.447	1.75	1.8	ug/L
	Zn	68	7115.289		98.980	1.41	1.4	ug/L
>	Ge	72	91551.389					ug/L
	As	75	10099.611		99.101	1.10	1.1	ug/L
	Se	77	1689.019		101.781	4.07	4.0	ug/L
	Se	82	1453.729		99.444	0.87	0.9	ug/L
L	Sr	88	31697.188		8.060	0.11	1.3	ug/L
	Mo	98	17919.350		40.124	0.77	1.9	ug/L
>	Rh	103	102168.125					ug/L
L	Ag	107	38094.763		39.913	0.72	1.8	ug/L
	Cd	111	9141.485		39.795	0.69	1.7	ug/L
	Cd	114	21638.925		40.028	0.57	1.4	ug/L
>	In	115	154167.697					ug/L
	Sn	120	41482.899		40.124	0.25	0.6	ug/L
L	Sb	121	27699.786		39.933	0.34	0.8	ug/L
	Ba	137	16815.284		39.862	0.92	2.3	ug/L
	Ba	138	105352.533		39.957	0.85	2.1	ug/L
>	Tb	159	233901.807					ug/L
	Tl	205	120421.693		39.971	0.37	0.9	ug/L
L	Pb	208	221459.988		99.908	1.40	1.4	ug/L
	Hg	200	1124.022		7.891	0.17	2.1	ug/L
	Hg	201	650.028		8.069	0.83	10.2	ug/L
>	Bi	209	171798.733					ug/L
L	U	238	242630.597		40.242	0.16	0.4	ug/L
	C	13	193.336					ug/L
	W	184	9.333					ug/L
	Pd	106	-92.108					ug/L
	Kr	83	8.833					ug/L
	Na	23	2245687.176		4126.521	438.95	10.6	ug/L
	Mg	24	1353693.954		4039.725	289.39	7.2	ug/L

	K	39	1857516.305	4046.255	24.49	0.6	ug/L
	Ca	44	65759.975	4055.551	88.20	2.2	ug/L
	Ti	47	16.667				ug/L
L	Sc-1	45	104967.895				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999983	Linear Thru Zero
B	11.009	0.000314	0.000	0.999970	Linear Thru Zero
Al	26.982	0.004927	0.000	0.999640	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007699	0.000	0.999670	Linear Thru Zero
Cr	51.941	0.007089	0.000	0.999902	Linear Thru Zero
Cr	52.941	0.000933	0.000	0.974397	Linear Thru Zero
Mn	54.938	0.012646	0.000	0.999909	Linear Thru Zero
Co	58.933	0.008006	0.000	0.999851	Linear Thru Zero
Ni	59.933	0.001633	0.000	0.999735	Linear Thru Zero
Cu	62.930	0.003851	0.000	0.999984	Linear Thru Zero
Cu	64.928	0.001797	0.000	0.999993	Linear Thru Zero
Zn	65.926	0.001101	0.000	0.999931	Linear Thru Zero
Zn	67.925	0.000783	0.000	0.999814	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001115	0.000	0.999826	Linear Thru Zero
Se	76.920	0.000113	0.000	0.999172	Linear Thru Zero
Se	81.917	0.000158	0.000	0.999847	Linear Thru Zero
Sr	87.906	0.022800	0.000	0.999892	Linear Thru Zero
Mo	97.906	0.004365	0.000	0.999982	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009342	0.000	0.999992	Linear Thru Zero
Cd	110.904	0.001490	0.000	0.999954	Linear Thru Zero
Cd	113.904	0.003506	0.000	0.999995	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006688	0.000	0.999983	Linear Thru Zero
Sb	120.904	0.004456	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001803	0.000	0.999971	Linear Thru Zero
Ba	137.905	0.011267	0.000	0.999997	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012866	0.000	0.999997	Linear Thru Zero
Pb	207.977	0.009477	0.000	0.999998	Linear Thru Zero
Hg	199.968	0.000829	0.000	0.999587	Linear Thru Zero
Hg	200.970	0.000468	0.000	0.999391	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.035094	0.000	0.999939	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	542.564540	0.000	0.998399	Linear Thru Zero
Mg	23.985	335.055943	0.000	0.999839	Linear Thru Zero
K	38.964	451.360558	0.000	0.999783	Linear Thru Zero
Ca	43.956	16.179464	0.000	0.999689	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Standard 5

Sample Date/Time: Friday, July 28, 2017 07:43:13

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1100

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 6

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9	1623.840		99.978	7.62	7.6	ug/L
	B	11	32633.411		1002.212	50.42	5.0	ug/L
	Al	27	122559.848		248.552	7.10	2.9	ug/L
>	Sc	45	102017.255					ug/L
	V	51	77126.464		99.964	0.70	0.7	ug/L
	Cr	52	72591.112		99.830	0.59	0.6	ug/L
	Cr	53	19569.698		98.314	4.66	4.7	ug/L
	Mn	55	321923.429		249.921	4.50	1.8	ug/L
	Co	59	80706.620		99.791	1.84	1.8	ug/L
L	Ni	60	41092.153		249.420	5.70	2.3	ug/L
	Cu	63	84684.991		249.420	1.99	0.8	ug/L
	Cu	65	39291.796		249.170	1.39	0.6	ug/L
	Zn	66	24530.061		249.960	2.54	1.0	ug/L
	Zn	68	17447.441		249.961	1.31	0.5	ug/L
>	Ge	72	89123.818					ug/L
	As	75	25322.917		250.854	2.21	0.9	ug/L
	Se	77	3093.622		249.315	2.63	1.1	ug/L
	Se	82	3627.931		251.124	3.81	1.5	ug/L
L	Sr	88	55586.468		20.040	0.29	1.4	ug/L
	Mo	98	43732.510		100.438	1.47	1.5	ug/L
>	Rh	103	97605.413					ug/L
L	Ag	107	90526.914		99.875	1.46	1.5	ug/L
	Cd	111	22427.366		100.181	1.00	1.0	ug/L
	Cd	114	52997.965		100.252	0.67	0.7	ug/L
>	In	115	148948.112					ug/L
	Sn	120	101048.061		100.227	0.91	0.9	ug/L
L	Sb	121	66885.606		100.067	1.84	1.8	ug/L
	Ba	137	41094.944		99.884	0.32	0.3	ug/L
	Ba	138	258044.013		99.965	0.31	0.3	ug/L
>	Tb	159	229440.928					ug/L
	Tl	205	293744.529		99.906	0.92	0.9	ug/L
L	Pb	208	536832.431		249.453	2.02	0.8	ug/L
	Hg	200	2746.431		20.021	0.28	1.4	ug/L
	Hg	201	1579.496		20.080	0.08	0.4	ug/L
>	Bi	209	164683.342					ug/L
L	U	238	603147.123		100.731	0.83	0.8	ug/L
	C	13	226.671					ug/L
	W	184	9.333					ug/L
	Pd	106	-149.578					ug/L
	Kr	83	11.167					ug/L
	Na	23	5519035.078		10027.354	783.40	7.8	ug/L
	Mg	24	3291500.536		9968.859	620.21	6.2	ug/L

	K	39	4286388.093	9895.661	100.02	1.0	ug/L
	Ca	44	156363.436	9938.426	141.14	1.4	ug/L
	Ti	47	43.333				ug/L
L	Sc-1	45	102017.255				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999997	Linear Thru Zero
B	11.009	0.000317	0.000	0.999983	Linear Thru Zero
Al	26.982	0.004799	0.000	0.999855	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007686	0.000	0.999942	Linear Thru Zero
Cr	51.941	0.007032	0.000	0.999976	Linear Thru Zero
Cr	52.941	0.000864	0.000	0.993973	Linear Thru Zero
Mn	54.938	0.012626	0.000	0.999984	Linear Thru Zero
Co	58.933	0.007927	0.000	0.999963	Linear Thru Zero
Ni	59.933	0.001615	0.000	0.999940	Linear Thru Zero
Cu	62.930	0.003809	0.000	0.999984	Linear Thru Zero
Cu	64.928	0.001769	0.000	0.999973	Linear Thru Zero
Zn	65.926	0.001100	0.000	0.999988	Linear Thru Zero
Zn	67.925	0.000782	0.000	0.999968	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001133	0.000	0.999943	Linear Thru Zero
Se	76.920	0.000111	0.000	0.999834	Linear Thru Zero
Se	81.917	0.000161	0.000	0.999927	Linear Thru Zero
Sr	87.906	0.023021	0.000	0.999972	Linear Thru Zero
Mo	97.906	0.004458	0.000	0.999951	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009287	0.000	0.999995	Linear Thru Zero
Cd	110.904	0.001503	0.000	0.999984	Linear Thru Zero
Cd	113.904	0.003549	0.000	0.999984	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006762	0.000	0.999985	Linear Thru Zero
Sb	120.904	0.004470	0.000	0.999994	Linear Thru Zero
Ba	136.905	0.001793	0.000	0.999992	Linear Thru Zero
Ba	137.905	0.011248	0.000	0.999999	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012809	0.000	0.999997	Linear Thru Zero
Pb	207.977	0.009379	0.000	0.999988	Linear Thru Zero
Hg	199.968	0.000833	0.000	0.999926	Linear Thru Zero
Hg	200.970	0.000477	0.000	0.999860	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036360	0.000	0.999863	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	549.721525	0.000	0.999711	Linear Thru Zero
Mg	23.985	330.162224	0.000	0.999948	Linear Thru Zero
K	38.964	430.005796	0.000	0.999699	Linear Thru Zero
Ca	43.956	15.718796	0.000	0.999853	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Blank

Sample Date/Time: Friday, July 28, 2017 08:36:25

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 1

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.333				ug/L
	B	11		228.003				ug/L
	Al	27		669.363				ug/L
>	Sc	45		110417.455				ug/L
	V	51		-2049.344				ug/L
	Cr	52		972.395				ug/L
	Cr	53		11542.343				ug/L
	Mn	55		240.004				ug/L
	Co	59		49.333				ug/L
	Ni	60		29.667				ug/L
	Cu	63		14.000				ug/L
	Cu	65		5.000				ug/L
	Zn	66		32.667				ug/L
	Zn	68		20.333				ug/L
>	Ge	72		100209.541				ug/L
	As	75		-7.662				ug/L
	Se	77		660.362				ug/L
	Se	82		12.267				ug/L
	Sr	88		16271.526				ug/L
	Mo	98		12.781				ug/L
>	Rh	103		110359.356				ug/L
	Ag	107		4.000				ug/L
	Cd	111		-0.715				ug/L
	Cd	114		4.487				ug/L
>	In	115		165778.412				ug/L
	Sn	120		116.659				ug/L
	Sb	121		113.334				ug/L
	Ba	137		15.989				ug/L
	Ba	138		103.990				ug/L
>	Tb	159		246964.071				ug/L
	Tl	205		49.000				ug/L
	Pb	208		9.667				ug/L
	Hg	200		8.637				ug/L
	Hg	201		2.000				ug/L
>	Bi	209		191484.144				ug/L
	U	238		25.667				ug/L
	C	13		213.336				ug/L
	W	184		4.666				ug/L
	Pd	106		0.000				ug/L
	Kr	83		7.667				ug/L
	Na	23		4914.905				ug/L
	Mg	24		173.335				ug/L

	K	39	29436.239	ug/L
	Ca	44	173.335	ug/L
	Ti	47	6.667	ug/L
L	Sc-1	45	110417.455	ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999997	Linear Thru Zero
B	11.009	0.000317	0.000	0.999983	Linear Thru Zero
Al	26.982	0.004799	0.000	0.999855	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007686	0.000	0.999942	Linear Thru Zero
Cr	51.941	0.007032	0.000	0.999976	Linear Thru Zero
Cr	52.941	0.000864	0.000	0.993973	Linear Thru Zero
Mn	54.938	0.012626	0.000	0.999984	Linear Thru Zero
Co	58.933	0.007927	0.000	0.999963	Linear Thru Zero
Ni	59.933	0.001615	0.000	0.999940	Linear Thru Zero
Cu	62.930	0.003809	0.000	0.999984	Linear Thru Zero
Cu	64.928	0.001769	0.000	0.999973	Linear Thru Zero
Zn	65.926	0.001100	0.000	0.999988	Linear Thru Zero
Zn	67.925	0.000782	0.000	0.999968	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001133	0.000	0.999943	Linear Thru Zero
Se	76.920	0.000111	0.000	0.999834	Linear Thru Zero
Se	81.917	0.000161	0.000	0.999927	Linear Thru Zero
Sr	87.906	0.023021	0.000	0.999972	Linear Thru Zero
Mo	97.906	0.004458	0.000	0.999951	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009287	0.000	0.999995	Linear Thru Zero
Cd	110.904	0.001503	0.000	0.999984	Linear Thru Zero
Cd	113.904	0.003549	0.000	0.999984	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006762	0.000	0.999985	Linear Thru Zero
Sb	120.904	0.004470	0.000	0.999994	Linear Thru Zero
Ba	136.905	0.001793	0.000	0.999992	Linear Thru Zero
Ba	137.905	0.011248	0.000	0.999999	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012809	0.000	0.999997	Linear Thru Zero
Pb	207.977	0.009379	0.000	0.999988	Linear Thru Zero
Hg	199.968	0.000833	0.000	0.999926	Linear Thru Zero
Hg	200.970	0.000477	0.000	0.999860	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036360	0.000	0.999863	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	549.721525	0.000	0.999711	Linear Thru Zero
Mg	23.985	330.162224	0.000	0.999948	Linear Thru Zero
K	38.964	430.005796	0.000	0.999699	Linear Thru Zero
Ca	43.956	15.718796	0.000	0.999853	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Standard 1

Sample Date/Time: Friday, July 28, 2017 08:39:52

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 2

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		20.667	1.000	0.20	20.4	ug/L
	B	11		942.058	20.000	1.59	7.9	ug/L
	Al	27		11700.921	20.000	0.75	3.8	ug/L
>	Sc	45		108641.075				ug/L
	V	51		-152.202	3.000	0.79	26.3	ug/L
	Cr	52		3419.260	3.000	0.11	3.6	ug/L
	Cr	53		11660.667	3.000	1.69	56.3	ug/L
	Mn	55		1657.512	1.000	0.03	3.1	ug/L
	Co	59		963.060	1.000	0.04	4.0	ug/L
L	Ni	60		402.011	1.000	0.01	0.5	ug/L
	Cu	63		838.712	2.000	0.06	3.0	ug/L
	Cu	65		392.010	2.000	0.05	2.5	ug/L
	Zn	66		610.024	5.000	0.02	0.4	ug/L
	Zn	68		443.679	5.000	0.27	5.4	ug/L
>	Ge	72		100297.433				ug/L
	As	75		287.293	2.000	0.19	9.3	ug/L
	Se	77		685.364	2.000	2.03	101.5	ug/L
	Se	82		46.234	2.000	0.68	34.1	ug/L
L	Sr	88		16637.314	0.200	0.08	39.2	ug/L
	Mo	98		475.279	1.000	0.06	5.7	ug/L
>	Rh	103		110304.579				ug/L
L	Ag	107		1060.740	1.000	0.04	3.9	ug/L
	Cd	111		245.048	1.000	0.13	13.2	ug/L
	Cd	114		597.165	1.000	0.07	6.8	ug/L
>	In	115		166637.744				ug/L
	Sn	120		1304.761	1.000	0.05	5.4	ug/L
L	Sb	121		1599.500	2.000	0.09	4.5	ug/L
	Ba	137		486.002	1.000	0.05	4.9	ug/L
	Ba	138		3107.280	1.000	0.01	0.9	ug/L
>	Tb	159		249403.736				ug/L
	Tl	205		3444.438	1.000	0.02	2.1	ug/L
L	Pb	208		2527.415	1.000	0.02	1.9	ug/L
	Hg	200		53.975	0.200	0.07	33.9	ug/L
	Hg	201		32.667	0.200	0.07	34.2	ug/L
>	Bi	209		191653.952				ug/L
L	U	238		6828.363	1.000	0.00	0.2	ug/L
	C	13		240.004				ug/L
	W	184		4.000				ug/L
	Pd	106		-1.878				ug/L
	Kr	83		11.500				ug/L
	Na	23		59718.247	100.000	7.21	7.2	ug/L
	Mg	24		35569.119	100.000	8.68	8.7	ug/L

	K	39	76956.961	100.000	7.82	7.8	ug/L
	Ca	44	1930.242	100.000	4.45	4.4	ug/L
	Ti	47	0.000				ug/L
L	Sc-1	45	108641.075				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000187	0.000	1.000000	Linear Thru Zero
B	11.009	0.000330	0.000	1.000000	Linear Thru Zero
Al	26.982	0.005078	0.000	1.000000	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.005719	0.000	1.000000	Linear Thru Zero
Cr	51.941	0.007562	0.000	1.000000	Linear Thru Zero
Cr	52.941	0.000945	0.000	1.000000	Linear Thru Zero
Mn	54.938	0.013091	0.000	1.000000	Linear Thru Zero
Co	58.933	0.008421	0.000	1.000000	Linear Thru Zero
Ni	59.933	0.003432	0.000	1.000000	Linear Thru Zero
Cu	62.930	0.004110	0.000	1.000000	Linear Thru Zero
Cu	64.928	0.001930	0.000	1.000000	Linear Thru Zero
Zn	65.926	0.001151	0.000	1.000000	Linear Thru Zero
Zn	67.925	0.000844	0.000	1.000000	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001470	0.000	1.000000	Linear Thru Zero
Se	76.920	0.000123	0.000	1.000000	Linear Thru Zero
Se	81.917	0.000169	0.000	1.000000	Linear Thru Zero
Sr	87.906	0.017445	0.000	1.000000	Linear Thru Zero
Mo	97.906	0.004193	0.000	1.000000	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009581	0.000	1.000000	Linear Thru Zero
Cd	110.904	0.001475	0.000	1.000000	Linear Thru Zero
Cd	113.904	0.003556	0.000	1.000000	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.007126	0.000	1.000000	Linear Thru Zero
Sb	120.904	0.004458	0.000	1.000000	Linear Thru Zero
Ba	136.905	0.001885	0.000	1.000000	Linear Thru Zero
Ba	137.905	0.012038	0.000	1.000000	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.013613	0.000	1.000000	Linear Thru Zero
Pb	207.977	0.010095	0.000	1.000000	Linear Thru Zero
Hg	199.968	0.001184	0.000	1.000000	Linear Thru Zero
Hg	200.970	0.000801	0.000	1.000000	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.035494	0.000	1.000000	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	548.033419	0.000	1.000000	Linear Thru Zero
Mg	23.985	353.957835	0.000	1.000000	Linear Thru Zero
K	38.964	475.207217	0.000	1.000000	Linear Thru Zero
Ca	43.956	17.569071	0.000	1.000000	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Standard 2

Sample Date/Time: Friday, July 28, 2017 08:43:20

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 3

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9	167.002		9.979	1.33	13.3	ug/L
	B	11	3841.635		100.074	8.85	8.8	ug/L
	Al	27	14505.717		25.144	1.01	4.0	ug/L
>	Sc	45	107429.649					ug/L
	V	51	5667.748		10.167	0.73	7.1	ug/L
	Cr	52	8773.502		9.969	0.21	2.1	ug/L
	Cr	53	11669.178		9.057	8.00	88.4	ug/L
	Mn	55	35150.135		25.000	0.91	3.6	ug/L
	Co	59	8832.069		9.997	0.18	1.8	ug/L
L	Ni	60	4615.718		24.960	0.86	3.4	ug/L
	Cu	63	9507.207		24.989	0.32	1.3	ug/L
	Cu	65	4424.272		24.987	0.76	3.0	ug/L
	Zn	66	2776.168		24.963	0.40	1.6	ug/L
	Zn	68	2019.265		24.957	0.73	2.9	ug/L
>	Ge	72	99039.661					ug/L
	As	75	2673.626		24.943	0.12	0.5	ug/L
	Se	77	884.884		24.951	2.36	9.5	ug/L
	Se	82	407.584		24.991	0.68	2.7	ug/L
L	Sr	88	20479.894		2.004	0.12	6.1	ug/L
	Mo	98	4716.305		10.003	0.11	1.1	ug/L
>	Rh	103	108571.630					ug/L
L	Ag	107	10094.621		9.997	0.11	1.1	ug/L
	Cd	111	2465.450		9.999	0.14	1.4	ug/L
	Cd	114	5852.670		9.998	0.14	1.4	ug/L
>	In	115	168202.968					ug/L
	Sn	120	10973.799		9.990	0.15	1.5	ug/L
L	Sb	121	7432.256		9.990	0.03	0.3	ug/L
	Ba	137	4529.945		9.997	0.08	0.8	ug/L
	Ba	138	28420.358		9.996	0.12	1.2	ug/L
>	Tb	159	245667.954					ug/L
	Tl	205	32452.319		9.997	0.11	1.1	ug/L
L	Pb	208	59941.026		24.999	0.43	1.7	ug/L
	Hg	200	327.960		1.992	0.11	5.5	ug/L
	Hg	201	166.669		1.983	0.34	17.0	ug/L
>	Bi	209	190409.184					ug/L
L	U	238	64554.125		9.995	0.08	0.8	ug/L
	C	13	206.670					ug/L
	W	184	7.333					ug/L
	Pd	106	9.831					ug/L
	Kr	83	10.833					ug/L
	Na	23	506769.222		999.090	79.05	7.9	ug/L
	Mg	24	331334.389		999.319	65.22	6.5	ug/L

	K	39	477764.687	999.407	13.21	1.3	ug/L
	Ca	44	16016.658	998.923	10.11	1.0	ug/L
	Ti	47	10.000				ug/L
L	Sc-1	45	107429.649				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000155	0.000	0.999784	Linear Thru Zero
B	11.009	0.000336	0.000	0.999993	Linear Thru Zero
Al	26.982	0.005124	0.000	0.999974	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007021	0.000	0.998455	Linear Thru Zero
Cr	51.941	0.007312	0.000	0.999948	Linear Thru Zero
Cr	52.941	0.000461	0.000	0.953984	Linear Thru Zero
Mn	54.938	0.013012	0.000	1.000000	Linear Thru Zero
Co	58.933	0.008183	0.000	0.999996	Linear Thru Zero
Ni	59.933	0.001712	0.000	0.999193	Linear Thru Zero
Cu	62.930	0.003836	0.000	0.999984	Linear Thru Zero
Cu	64.928	0.001786	0.000	0.999979	Linear Thru Zero
Zn	65.926	0.001110	0.000	0.999972	Linear Thru Zero
Zn	67.925	0.000809	0.000	0.999963	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001085	0.000	0.999599	Linear Thru Zero
Se	76.920	0.000094	0.000	0.999696	Linear Thru Zero
Se	81.917	0.000160	0.000	0.999989	Linear Thru Zero
Sr	87.906	0.022175	0.000	0.999773	Linear Thru Zero
Mo	97.906	0.004331	0.000	0.999995	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009297	0.000	0.999995	Linear Thru Zero
Cd	110.904	0.001466	0.000	1.000000	Linear Thru Zero
Cd	113.904	0.003478	0.000	0.999997	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006460	0.000	0.999947	Linear Thru Zero
Sb	120.904	0.004354	0.000	0.999989	Linear Thru Zero
Ba	136.905	0.001838	0.000	0.999997	Linear Thru Zero
Ba	137.905	0.011531	0.000	0.999990	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.013194	0.000	0.999995	Linear Thru Zero
Pb	207.977	0.009758	0.000	0.999999	Linear Thru Zero
Hg	199.968	0.000842	0.000	0.999176	Linear Thru Zero
Hg	200.970	0.000436	0.000	0.996527	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.033905	0.000	0.999989	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	502.311535	0.000	0.999959	Linear Thru Zero
Mg	23.985	331.386764	0.000	0.999977	Linear Thru Zero
K	38.964	448.594575	0.000	0.999982	Linear Thru Zero
Ca	43.956	15.860410	0.000	0.999942	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Standard 3

Sample Date/Time: Friday, July 28, 2017 08:46:47

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 4

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte Mass	Meas. Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit	
	Be	9	317.007	19.860	2.42	12.2	ug/L
	B	11	6626.904	195.511	21.68	11.1	ug/L
	Al	27	26749.392	49.461	2.36	4.8	ug/L
>	Sc	45	105575.609				ug/L
	V	51	14427.848	20.421	0.50	2.4	ug/L
	Cr	52	16109.864	19.930	0.48	2.4	ug/L
	Cr	53	12029.745	20.107	4.46	22.2	ug/L
	Mn	55	68637.230	49.963	0.62	1.2	ug/L
	Co	59	17384.298	20.018	0.55	2.7	ug/L
L	Ni	60	8926.847	49.855	1.62	3.3	ug/L
	Cu	63	18766.546	49.885	0.42	0.8	ug/L
	Cu	65	8807.042	49.964	0.48	1.0	ug/L
	Zn	66	5458.603	49.888	1.83	3.7	ug/L
	Zn	68	3908.327	49.704	0.95	1.9	ug/L
>	Ge	72	98900.759				ug/L
	As	75	5489.291	50.243	1.24	2.5	ug/L
	Se	77	1155.420	50.784	5.38	10.6	ug/L
	Se	82	778.124	49.693	2.22	4.5	ug/L
L	Sr	88	24531.751	3.972	0.07	1.8	ug/L
	Mo	98	9341.786	20.002	0.23	1.2	ug/L
>	Rh	103	107657.648				ug/L
L	Ag	107	20429.760	20.082	0.35	1.8	ug/L
	Cd	111	4857.871	20.019	0.67	3.3	ug/L
	Cd	114	11572.061	20.033	0.29	1.4	ug/L
>	In	115	164985.610				ug/L
	Sn	120	22179.225	20.137	0.11	0.6	ug/L
L	Sb	121	14978.571	20.141	0.59	2.9	ug/L
	Ba	137	9126.337	20.013	0.15	0.8	ug/L
	Ba	138	56419.418	19.953	0.25	1.3	ug/L
>	Tb	159	247029.972				ug/L
	Tl	205	64498.998	19.954	0.22	1.1	ug/L
L	Pb	208	118435.604	49.822	0.52	1.0	ug/L
	Hg	200	657.297	4.024	0.06	1.5	ug/L
	Hg	201	361.342	4.076	0.39	9.6	ug/L
>	Bi	209	186958.002				ug/L
L	U	238	129542.848	20.086	0.03	0.1	ug/L
	C	13	206.670				ug/L
	W	184	10.000				ug/L
	Pd	106	-31.998				ug/L
	Kr	83	9.500				ug/L
	Na	23	995889.508	1994.462	202.49	10.2	ug/L
	Mg	24	651258.637	1992.788	207.82	10.4	ug/L

	K	39	894667.567	1985.218	52.20	2.6	ug/L
	Ca	44	31065.948	1989.249	30.64	1.5	ug/L
	Ti	47	36.667				ug/L
L	Sc-1	45	105575.609				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000151	0.000	0.999857	Linear Thru Zero
B	11.009	0.000309	0.000	0.999031	Linear Thru Zero
Al	26.982	0.004993	0.000	0.999850	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007608	0.000	0.998908	Linear Thru Zero
Cr	51.941	0.007220	0.000	0.999966	Linear Thru Zero
Cr	52.941	0.000470	0.000	0.989934	Linear Thru Zero
Mn	54.938	0.012974	0.000	0.999999	Linear Thru Zero
Co	58.933	0.008211	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001692	0.000	0.999818	Linear Thru Zero
Cu	62.930	0.003801	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001781	0.000	0.999995	Linear Thru Zero
Zn	65.926	0.001100	0.000	0.999984	Linear Thru Zero
Zn	67.925	0.000791	0.000	0.999925	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001107	0.000	0.999875	Linear Thru Zero
Se	76.920	0.000100	0.000	0.999458	Linear Thru Zero
Se	81.917	0.000156	0.000	0.999923	Linear Thru Zero
Sr	87.906	0.021567	0.000	0.999851	Linear Thru Zero
Mo	97.906	0.004332	0.000	0.999999	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009450	0.000	0.999966	Linear Thru Zero
Cd	110.904	0.001472	0.000	0.999998	Linear Thru Zero
Cd	113.904	0.003501	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006641	0.000	0.999897	Linear Thru Zero
Sb	120.904	0.004476	0.000	0.999902	Linear Thru Zero
Ba	136.905	0.001843	0.000	0.999998	Linear Thru Zero
Ba	137.905	0.011426	0.000	0.999987	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.013075	0.000	0.999988	Linear Thru Zero
Pb	207.977	0.009622	0.000	0.999975	Linear Thru Zero
Hg	199.968	0.000862	0.000	0.999773	Linear Thru Zero
Hg	200.970	0.000472	0.000	0.998680	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.034490	0.000	0.999962	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	496.863045	0.000	0.999976	Linear Thru Zero
Mg	23.985	326.720806	0.000	0.999969	Linear Thru Zero
K	38.964	435.836962	0.000	0.999888	Linear Thru Zero
Ca	43.956	15.529788	0.000	0.999931	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Standard 4

Sample Date/Time: Friday, July 28, 2017 08:50:15

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 5

Report Filename PE_EL2_170728.TXT

Concentration Results

Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
Be	9	644.361		40.201	5.92	14.7	ug/L
B	11	12901.567		398.330	29.99	7.5	ug/L
Al	27	50286.372		98.761	3.30	3.3	ug/L
Sc	45	104155.708					ug/L
V	51	30881.783		40.337	0.92	2.3	ug/L
Cr	52	31024.805		40.011	0.41	1.0	ug/L
Cr	53	14842.806		45.563	5.73	12.6	ug/L
Mn	55	134085.656		99.782	1.29	1.3	ug/L
Co	59	34063.267		39.951	0.98	2.4	ug/L
Ni	60	17397.990		99.665	2.90	2.9	ug/L
Cu	63	36447.151		99.637	1.00	1.0	ug/L
Cu	65	17114.356		99.686	1.49	1.5	ug/L
Zn	66	10385.343		99.179	1.68	1.7	ug/L
Zn	68	7291.788		98.617	2.08	2.1	ug/L
Ge	72	97327.981					ug/L
As	75	10923.845		100.348	0.81	0.8	ug/L
Se	77	1705.356		102.009	5.33	5.2	ug/L
Se	82	1552.069		100.344	1.32	1.3	ug/L
Sr	88	33086.680		8.055	0.11	1.4	ug/L
Mo	98	18539.817		40.116	0.27	0.7	ug/L
Rh	103	105605.548					ug/L
Ag	107	38953.048		39.766	0.62	1.6	ug/L
Cd	111	9564.263		40.085	0.30	0.7	ug/L
Cd	114	22866.304		40.131	0.47	1.2	ug/L
In	115	161020.282					ug/L
Sn	120	43685.703		40.176	0.73	1.8	ug/L
Sb	121	29347.894		40.135	0.48	1.2	ug/L
Ba	137	17868.976		39.830	0.38	1.0	ug/L
Ba	138	113042.524		40.023	0.20	0.5	ug/L
Tb	159	246533.985					ug/L
Tl	205	127322.600		39.876	0.24	0.6	ug/L
Pb	208	233572.210		99.629	0.32	0.3	ug/L
Hg	200	1216.028		7.931	0.26	3.2	ug/L
Hg	201	704.699		8.049	0.20	2.5	ug/L
Bi	209	181420.253					ug/L
U	238	259495.026		40.340	0.02	0.1	ug/L
C	13	246.671					ug/L
W	184	10.667					ug/L
Pd	106	-92.078					ug/L
Kr	83	10.333					ug/L
Na	23	2150758.182		4071.667	699.56	17.2	ug/L
Mg	24	1314327.353		4005.284	313.37	7.8	ug/L

	K	39	1804256.472	4016.986	61.89	1.5	ug/L
	Ca	44	63023.801	4011.129	26.89	0.7	ug/L
	Ti	47	13.333				ug/L
L	Sc-1	45	104155.708				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000153	0.000	0.999927	Linear Thru Zero
B	11.009	0.000305	0.000	0.999734	Linear Thru Zero
Al	26.982	0.004823	0.000	0.999741	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007815	0.000	0.999638	Linear Thru Zero
Cr	51.941	0.007226	0.000	0.999992	Linear Thru Zero
Cr	52.941	0.000836	0.000	0.970202	Linear Thru Zero
Mn	54.938	0.012884	0.000	0.999992	Linear Thru Zero
Co	58.933	0.008179	0.000	0.999997	Linear Thru Zero
Ni	59.933	0.001674	0.000	0.999938	Linear Thru Zero
Cu	62.930	0.003757	0.000	0.999976	Linear Thru Zero
Cu	64.928	0.001764	0.000	0.999983	Linear Thru Zero
Zn	65.926	0.001072	0.000	0.999889	Linear Thru Zero
Zn	67.925	0.000758	0.000	0.999677	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001119	0.000	0.999952	Linear Thru Zero
Se	76.920	0.000107	0.000	0.999243	Linear Thru Zero
Se	81.917	0.000158	0.000	0.999963	Linear Thru Zero
Sr	87.906	0.022049	0.000	0.999891	Linear Thru Zero
Mo	97.906	0.004373	0.000	0.999986	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009277	0.000	0.999937	Linear Thru Zero
Cd	110.904	0.001482	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003538	0.000	0.999981	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006735	0.000	0.999945	Linear Thru Zero
Sb	120.904	0.004524	0.000	0.999959	Linear Thru Zero
Ba	136.905	0.001818	0.000	0.999971	Linear Thru Zero
Ba	137.905	0.011446	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012946	0.000	0.999982	Linear Thru Zero
Pb	207.977	0.009509	0.000	0.999972	Linear Thru Zero
Hg	199.968	0.000839	0.000	0.999823	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999638	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.035454	0.000	0.999876	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	527.018418	0.000	0.999483	Linear Thru Zero
Mg	23.985	328.105060	0.000	0.999990	Linear Thru Zero
K	38.964	441.828849	0.000	0.999945	Linear Thru Zero
Ca	43.956	15.669020	0.000	0.999971	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: Standard 5

Sample Date/Time: Friday, July 28, 2017 08:53:42

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 6

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9	1639.844		100.719	11.07	11.0	ug/L
	B	11	31759.221		1001.516	63.67	6.4	ug/L
	Al	27	120941.040		248.861	5.83	2.3	ug/L
>	Sc	45	102292.318					ug/L
	V	51	79433.795		100.301	1.17	1.2	ug/L
	Cr	52	74321.186		99.886	0.98	1.0	ug/L
	Cr	53	19246.719		100.028	5.16	5.2	ug/L
	Mn	55	331017.986		250.190	4.18	1.7	ug/L
	Co	59	83293.007		99.919	1.60	1.6	ug/L
L	Ni	60	42455.208		249.623	5.42	2.2	ug/L
	Cu	63	87494.615		249.491	0.55	0.2	ug/L
	Cu	65	40723.206		249.127	1.63	0.7	ug/L
	Zn	66	25485.829		250.327	1.39	0.6	ug/L
	Zn	68	18099.273		250.557	3.59	1.4	ug/L
>	Ge	72	94228.860					ug/L
	As	75	26512.732		250.255	0.83	0.3	ug/L
	Se	77	3168.653		250.384	5.84	2.3	ug/L
	Se	82	3764.822		250.443	1.22	0.5	ug/L
L	Sr	88	57489.731		20.053	0.33	1.6	ug/L
	Mo	98	45760.472		100.483	1.26	1.3	ug/L
>	Rh	103	101710.071					ug/L
L	Ag	107	94879.005		100.095	0.96	1.0	ug/L
	Cd	111	23650.594		100.165	1.41	1.4	ug/L
	Cd	114	56311.829		100.117	1.91	1.9	ug/L
>	In	115	158094.377					ug/L
	Sn	120	105808.929		99.871	2.01	2.0	ug/L
L	Sb	121	72836.568		100.289	1.03	1.0	ug/L
	Ba	137	44116.607		99.905	0.20	0.2	ug/L
	Ba	138	277293.014		99.876	0.78	0.8	ug/L
>	Tb	159	243898.316					ug/L
	Tl	205	310324.160		99.694	0.55	0.6	ug/L
L	Pb	208	572033.222		249.410	2.12	0.9	ug/L
	Hg	200	2999.158		20.069	0.45	2.2	ug/L
	Hg	201	1680.850		19.994	0.50	2.5	ug/L
>	Bi	209	174690.095					ug/L
L	U	238	638701.677		100.529	0.70	0.7	ug/L
	C	13	206.670					ug/L
	W	184	14.667					ug/L
	Pd	106	-175.500					ug/L
	Kr	83	12.167					ug/L
	Na	23	5438133.803		10052.372	666.60	6.6	ug/L
	Mg	24	3303004.972		10011.463	661.13	6.6	ug/L

	K	39	4298009.974	9939.473	128.24	1.3	ug/L
	Ca	44	150233.243	9923.870	198.48	2.0	ug/L
	Ti	47	40.000				ug/L
L	Sc-1	45	102292.318				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - ICV

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: ICV1

Sample Date/Time: Friday, July 28, 2017 07:50:09

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1100

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 160

Report Filename PE_EL2_170728.TXT

Concentration Results

Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
Be	9		862.716	51.614	8.11	15.7	ug/L
B	11		17177.303	511.184	32.40	6.3	ug/L
Al	27		67151.129	131.967	2.65	2.0	ug/L
Sc	45		104696.520				ug/L
V	51		38608.626	49.584	0.65	1.3	ug/L
Cr	52		39600.229	52.440	0.86	1.6	ug/L
Cr	53		15542.019	48.183	6.42	13.3	ug/L
Mn	55		173420.988	131.162	2.83	2.2	ug/L
Co	59		42283.914	50.943	1.40	2.7	ug/L
Ni	60		22324.351	132.017	4.29	3.3	ug/L
Cu	63		46858.656	131.710	1.42	1.1	ug/L
Cu	65		21843.306	132.242	2.36	1.8	ug/L
Zn	66		13760.307	133.684	1.40	1.0	ug/L
Zn	68		9858.316	134.655	0.68	0.5	ug/L
Ge	72		93383.068				ug/L
As	75		13895.274	131.472	3.01	2.3	ug/L
Se	77		1918.906	121.942	2.85	2.3	ug/L
Se	82		1919.634	126.291	1.54	1.2	ug/L
Sr	88		36983.703	10.153	0.31	3.1	ug/L
Mo	98		22621.456	48.044	0.83	1.7	ug/L
Rh	103		105508.861				ug/L
Ag	107		50057.043	51.083	0.23	0.4	ug/L
Cd	111		11713.098	49.152	1.14	2.3	ug/L
Cd	114		28265.153	50.216	1.38	2.7	ug/L
In	115		158578.361				ug/L
Sn	120		53947.164	50.207	0.28	0.5	ug/L
Sb	121		33002.012	46.164	1.10	2.4	ug/L
Ba	137		22193.883	52.437	0.28	0.5	ug/L
Ba	138		138079.529	51.998	0.08	0.1	ug/L
Tb	159		235976.266				ug/L
Tl	205		158338.877	52.340	0.42	0.8	ug/L
Pb	208		288330.269	130.264	1.34	1.0	ug/L
Hg	200		1935.518	12.889	0.54	4.2	ug/L
Hg	201		1101.412	12.790	0.56	4.4	ug/L
Bi	209		180209.854				ug/L
U	238		313613.150	47.862	0.30	0.6	ug/L
C	13		293.339				ug/L
W	184		9.333				ug/L
Pd	106		-136.477				ug/L
Kr	83		12.500				ug/L
Na	23		8825.090	3.715	1.52	40.9	ug/L
Mg	24		650.028	1.484	0.22	14.7	ug/L

K	39	31250.068	0.125	2.57	2064.4	ug/L
Ca	44	763.371	39.446	5.14	13.0	ug/L
Ti	47	20.000				ug/L
Sc-1	45	104696.520				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
> Sc	45		98.313
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
> Ge	72		99.358
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
> Rh	103		101.439
Ag	107		
Cd	111		
Cd	114		
> In	115		101.264
Sn	120		
Sb	121		
Ba	137		
Ba	138		
> Tb	159		101.457
Tl	205		
Pb	208		
Hg	200		
Hg	201		
> Bi	209		101.154
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999997	Linear Thru Zero
B	11.009	0.000317	0.000	0.999983	Linear Thru Zero
Al	26.982	0.004799	0.000	0.999855	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007686	0.000	0.999942	Linear Thru Zero
Cr	51.941	0.007032	0.000	0.999976	Linear Thru Zero
Cr	52.941	0.000864	0.000	0.993973	Linear Thru Zero
Mn	54.938	0.012626	0.000	0.999984	Linear Thru Zero
Co	58.933	0.007927	0.000	0.999963	Linear Thru Zero
Ni	59.933	0.001615	0.000	0.999940	Linear Thru Zero
Cu	62.930	0.003809	0.000	0.999984	Linear Thru Zero
Cu	64.928	0.001769	0.000	0.999973	Linear Thru Zero
Zn	65.926	0.001100	0.000	0.999988	Linear Thru Zero
Zn	67.925	0.000782	0.000	0.999968	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001133	0.000	0.999943	Linear Thru Zero
Se	76.920	0.000111	0.000	0.999834	Linear Thru Zero
Se	81.917	0.000161	0.000	0.999927	Linear Thru Zero
Sr	87.906	0.023021	0.000	0.999972	Linear Thru Zero
Mo	97.906	0.004458	0.000	0.999951	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009287	0.000	0.999995	Linear Thru Zero
Cd	110.904	0.001503	0.000	0.999984	Linear Thru Zero
Cd	113.904	0.003549	0.000	0.999984	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006762	0.000	0.999985	Linear Thru Zero
Sb	120.904	0.004470	0.000	0.999994	Linear Thru Zero
Ba	136.905	0.001793	0.000	0.999992	Linear Thru Zero
Ba	137.905	0.011248	0.000	0.999999	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012809	0.000	0.999997	Linear Thru Zero
Pb	207.977	0.009379	0.000	0.999988	Linear Thru Zero
Hg	199.968	0.000833	0.000	0.999926	Linear Thru Zero
Hg	200.970	0.000477	0.000	0.999860	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036360	0.000	0.999863	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	549.721525	0.000	0.999711	Linear Thru Zero
Mg	23.985	330.162224	0.000	0.999948	Linear Thru Zero
K	38.964	430.005796	0.000	0.999699	Linear Thru Zero
Ca	43.956	15.718796	0.000	0.999853	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - ICB

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: ICB1

Sample Date/Time: Friday, July 28, 2017 08:04:16

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1100

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 1

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.333	0.000	0.03	14760.6	ug/L
	B	11		244.004	1.789	0.86	47.9	ug/L
	Al	27		929.391	0.105	0.23	215.0	ug/L
>	Sc	45		110080.027				ug/L
	V	51		-2426.855	-1.256	0.12	9.7	ug/L
	Cr	52		964.894	-0.121	0.07	54.3	ug/L
	Cr	53		12158.275	4.102	2.37	57.7	ug/L
	Mn	55		368.676	0.163	0.01	4.1	ug/L
	Co	59		40.333	0.003	0.01	242.6	ug/L
L	Ni	60		34.667	0.040	0.02	48.0	ug/L
	Cu	63		23.000	0.021	0.06	277.7	ug/L
	Cu	65		5.667	0.019	0.01	75.2	ug/L
	Zn	66		30.333	0.028	0.01	28.1	ug/L
	Zn	68		31.000	0.070	0.06	81.8	ug/L
>	Ge	72		96570.481				ug/L
	As	75		40.339	0.533	0.95	177.4	ug/L
	Se	77		614.525	-5.614	2.98	53.1	ug/L
	Se	82		15.788	-0.049	0.15	308.7	ug/L
L	Sr	88		15605.147	-0.036	0.13	348.4	ug/L
	Mo	98		22.562	-0.001	0.01	1433.9	ug/L
>	Rh	103		103738.838				ug/L
L	Ag	107		10.667	0.006	0.00	77.5	ug/L
	Cd	111		0.618	0.005	0.01	93.6	ug/L
	Cd	114		8.245	0.008	0.00	33.1	ug/L
>	In	115		154906.059				ug/L
	Sn	120		141.335	0.032	0.01	41.3	ug/L
L	Sb	121		242.004	-0.044	0.03	60.2	ug/L
	Ba	137		17.661	0.019	0.01	77.8	ug/L
	Ba	138		98.661	0.013	0.01	58.9	ug/L
>	Tb	159		225438.597				ug/L
	Tl	205		130.001	0.000	0.01	402495.6	ug/L
L	Pb	208		15.000	0.002	0.00	184.5	ug/L
	Hg	200		5.295	0.032	0.03	88.7	ug/L
	Hg	201		6.667	0.064	0.05	77.5	ug/L
>	Bi	209		175436.071				ug/L
L	U	238		28.000	0.003	0.00	56.1	ug/L
	C	13		260.005				ug/L
	W	184		6.000				ug/L
	Pd	106		-0.130				ug/L
	Kr	83		5.167				ug/L
	Na	23		5415.248	-2.488	0.83	33.4	ug/L
	Mg	24		170.002	0.030	0.08	264.6	ug/L

K	39	27990.920	-7.455	3.28	44.1	ug/L
Ca	44	280.005	8.695	3.54	40.7	ug/L
Ti	47	3.333				ug/L
Sc-1	45	110080.027				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
> Sc	45		103.369
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
> Ge	72		102.750
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
> Rh	103		99.737
Ag	107		
Cd	111		
Cd	114		
> In	115		98.919
Sn	120		
Sb	121		
Ba	137		
Ba	138		
> Tb	159		96.926
Tl	205		
Pb	208		
Hg	200		
Hg	201		
> Bi	209		98.474
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999997	Linear Thru Zero
B	11.009	0.000317	0.000	0.999983	Linear Thru Zero
Al	26.982	0.004799	0.000	0.999855	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007686	0.000	0.999942	Linear Thru Zero
Cr	51.941	0.007032	0.000	0.999976	Linear Thru Zero
Cr	52.941	0.000864	0.000	0.993973	Linear Thru Zero
Mn	54.938	0.012626	0.000	0.999984	Linear Thru Zero
Co	58.933	0.007927	0.000	0.999963	Linear Thru Zero
Ni	59.933	0.001615	0.000	0.999940	Linear Thru Zero
Cu	62.930	0.003809	0.000	0.999984	Linear Thru Zero
Cu	64.928	0.001769	0.000	0.999973	Linear Thru Zero
Zn	65.926	0.001100	0.000	0.999988	Linear Thru Zero
Zn	67.925	0.000782	0.000	0.999968	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001133	0.000	0.999943	Linear Thru Zero
Se	76.920	0.000111	0.000	0.999834	Linear Thru Zero
Se	81.917	0.000161	0.000	0.999927	Linear Thru Zero
Sr	87.906	0.023021	0.000	0.999972	Linear Thru Zero
Mo	97.906	0.004458	0.000	0.999951	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009287	0.000	0.999995	Linear Thru Zero
Cd	110.904	0.001503	0.000	0.999984	Linear Thru Zero
Cd	113.904	0.003549	0.000	0.999984	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006762	0.000	0.999985	Linear Thru Zero
Sb	120.904	0.004470	0.000	0.999994	Linear Thru Zero
Ba	136.905	0.001793	0.000	0.999992	Linear Thru Zero
Ba	137.905	0.011248	0.000	0.999999	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012809	0.000	0.999997	Linear Thru Zero
Pb	207.977	0.009379	0.000	0.999988	Linear Thru Zero
Hg	199.968	0.000833	0.000	0.999926	Linear Thru Zero
Hg	200.970	0.000477	0.000	0.999860	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036360	0.000	0.999863	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	549.721525	0.000	0.999711	Linear Thru Zero
Mg	23.985	330.162224	0.000	0.999948	Linear Thru Zero
K	38.964	430.005796	0.000	0.999699	Linear Thru Zero
Ca	43.956	15.718796	0.000	0.999853	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - CCV

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: CCV1

Sample Date/Time: Friday, July 28, 2017 08:29:29

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1100

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 5

Report Filename PE_EL2_170728.TXT

Concentration Results

Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
Be	9		786.374	43.280	3.76	8.7	ug/L
B	11		16322.061	445.746	20.49	4.6	ug/L
Al	27		56720.159	102.025	1.64	1.6	ug/L
Sc	45		113982.225				ug/L
V	51		32121.845	38.296	0.50	1.3	ug/L
Cr	52		32455.355	39.152	0.96	2.4	ug/L
Cr	53		16998.601	48.960	5.56	11.3	ug/L
Mn	55		143657.839	99.785	2.64	2.6	ug/L
Co	59		35545.977	39.326	0.99	2.5	ug/L
Ni	60		18236.607	99.002	2.98	3.0	ug/L
Cu	63		37497.872	99.543	0.92	0.9	ug/L
Cu	65		17471.156	99.900	1.44	1.4	ug/L
Zn	66		10796.574	99.040	1.13	1.1	ug/L
Zn	68		7624.111	98.294	1.30	1.3	ug/L
Ge	72		98864.341				ug/L
As	75		10765.713	96.276	2.06	2.1	ug/L
Se	77		1778.372	98.987	3.49	3.5	ug/L
Se	82		1575.411	97.663	2.49	2.6	ug/L
Sr	88		34345.522	8.038	0.19	2.3	ug/L
Mo	98		18510.550	39.010	0.12	0.3	ug/L
Rh	103		106302.280				ug/L
Ag	107		40021.856	40.536	0.16	0.4	ug/L
Cd	111		9385.280	38.091	0.23	0.6	ug/L
Cd	114		22601.098	38.840	0.15	0.4	ug/L
In	115		163936.295				ug/L
Sn	120		43709.774	39.328	0.25	0.6	ug/L
Sb	121		28622.497	38.666	0.66	1.7	ug/L
Ba	137		17804.829	41.004	0.28	0.7	ug/L
Ba	138		110324.786	40.495	0.12	0.3	ug/L
Tb	159		242067.254				ug/L
Tl	205		127575.452	41.099	0.49	1.2	ug/L
Pb	208		234434.585	103.250	0.93	0.9	ug/L
Hg	200		1157.327	7.661	0.13	1.7	ug/L
Hg	201		666.029	7.697	0.76	9.8	ug/L
Bi	209		181246.118				ug/L
U	238		257408.967	39.067	0.48	1.2	ug/L
C	13		273.338				ug/L
W	184		14.667				ug/L
Pd	106		-64.290				ug/L
Kr	83		9.833				ug/L
Na	23		2562788.448	4649.637	391.41	8.4	ug/L
Mg	24		1475157.497	4467.493	327.79	7.3	ug/L

	K	39	2039576.251	4670.588	66.15	1.4	ug/L
	Ca	44	70952.457	4504.742	79.24	1.8	ug/L
	Ti	47	16.667				ug/L
L	Sc-1	45	113982.225				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		107.033
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		105.190
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		102.201
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		104.686
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		104.076
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		101.736
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999997	Linear Thru Zero
B	11.009	0.000317	0.000	0.999983	Linear Thru Zero
Al	26.982	0.004799	0.000	0.999855	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007686	0.000	0.999942	Linear Thru Zero
Cr	51.941	0.007032	0.000	0.999976	Linear Thru Zero
Cr	52.941	0.000864	0.000	0.993973	Linear Thru Zero
Mn	54.938	0.012626	0.000	0.999984	Linear Thru Zero
Co	58.933	0.007927	0.000	0.999963	Linear Thru Zero
Ni	59.933	0.001615	0.000	0.999940	Linear Thru Zero
Cu	62.930	0.003809	0.000	0.999984	Linear Thru Zero
Cu	64.928	0.001769	0.000	0.999973	Linear Thru Zero
Zn	65.926	0.001100	0.000	0.999988	Linear Thru Zero
Zn	67.925	0.000782	0.000	0.999968	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001133	0.000	0.999943	Linear Thru Zero
Se	76.920	0.000111	0.000	0.999834	Linear Thru Zero
Se	81.917	0.000161	0.000	0.999927	Linear Thru Zero
Sr	87.906	0.023021	0.000	0.999972	Linear Thru Zero
Mo	97.906	0.004458	0.000	0.999951	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009287	0.000	0.999995	Linear Thru Zero
Cd	110.904	0.001503	0.000	0.999984	Linear Thru Zero
Cd	113.904	0.003549	0.000	0.999984	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006762	0.000	0.999985	Linear Thru Zero
Sb	120.904	0.004470	0.000	0.999994	Linear Thru Zero
Ba	136.905	0.001793	0.000	0.999992	Linear Thru Zero
Ba	137.905	0.011248	0.000	0.999999	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012809	0.000	0.999997	Linear Thru Zero
Pb	207.977	0.009379	0.000	0.999988	Linear Thru Zero
Hg	199.968	0.000833	0.000	0.999926	Linear Thru Zero
Hg	200.970	0.000477	0.000	0.999860	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036360	0.000	0.999863	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	549.721525	0.000	0.999711	Linear Thru Zero
Mg	23.985	330.162224	0.000	0.999948	Linear Thru Zero
K	38.964	430.005796	0.000	0.999699	Linear Thru Zero
Ca	43.956	15.718796	0.000	0.999853	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: CCV2

Sample Date/Time: Friday, July 28, 2017 09:00:38

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 5

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9	661.362		40.033	5.16	12.9	ug/L
	B	11	13137.955		404.820	25.30	6.2	ug/L
	Al	27	50157.595		101.047	3.48	3.4	ug/L
>	Sc	45	103680.932					ug/L
	V	51	30894.143		39.946	0.85	2.1	ug/L
	Cr	52	30877.880		40.231	0.69	1.7	ug/L
	Cr	53	15112.332		49.409	5.54	11.2	ug/L
	Mn	55	135675.692		101.102	2.41	2.4	ug/L
	Co	59	34180.785		40.438	1.12	2.8	ug/L
L	Ni	60	17585.423		101.911	1.79	1.8	ug/L
	Cu	63	36562.733		102.649	1.16	1.1	ug/L
	Cu	65	16863.141		101.565	0.96	1.0	ug/L
	Zn	66	10459.774		101.010	0.81	0.8	ug/L
	Zn	68	7446.604		101.349	0.50	0.5	ug/L
>	Ge	72	95674.460					ug/L
	As	75	10709.821		99.606	1.11	1.1	ug/L
	Se	77	1693.353		102.822	2.44	2.4	ug/L
	Se	82	1544.902		100.731	1.52	1.5	ug/L
L	Sr	88	33328.731		8.328	0.10	1.3	ug/L
	Mo	98	18640.124		39.407	0.26	0.7	ug/L
>	Rh	103	105611.499					ug/L
L	Ag	107	39134.634		39.769	0.90	2.3	ug/L
	Cd	111	9537.278		38.941	0.90	2.3	ug/L
	Cd	114	22950.242		39.332	1.00	2.5	ug/L
>	In	115	163993.885					ug/L
	Sn	120	43398.033		39.426	0.41	1.0	ug/L
L	Sb	121	29564.042		39.152	0.48	1.2	ug/L
	Ba	137	18206.082		41.080	0.44	1.1	ug/L
	Ba	138	113589.777		40.764	0.35	0.9	ug/L
>	Tb	159	244680.358					ug/L
	Tl	205	127121.912		40.702	0.47	1.1	ug/L
L	Pb	208	232859.393		101.205	0.47	0.5	ug/L
	Hg	200	1175.346		7.583	0.27	3.6	ug/L
	Hg	201	736.036		8.478	1.08	12.7	ug/L
>	Bi	209	180389.023					ug/L
L	U	238	257620.239		39.265	0.14	0.4	ug/L
	C	13	200.003					ug/L
	W	184	12.000					ug/L
	Pd	106	-108.509					ug/L
	Kr	83	10.167					ug/L
	Na	23	2093563.860		3864.353	689.04	17.8	ug/L
	Mg	24	1297846.535		3933.475	321.62	8.2	ug/L

	K	39	1790735.605	4101.226	24.16	0.6	ug/L
	Ca	44	62093.065	4094.920	114.43	2.8	ug/L
	Ti	47	36.667				ug/L
L	Sc-1	45	103680.932				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		93.899
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		95.474
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		95.698
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		98.924
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		99.075
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		94.206
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: CCV3

Sample Date/Time: Friday, July 28, 2017 09:41:14

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 5

Report Filename PE_EL2_170728.TXT

Concentration Results

Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
Be	9		747.704	41.342	4.62	11.2	ug/L
B	11		16916.761	476.533	42.24	8.9	ug/L
Al	27		56881.059	104.563	4.86	4.7	ug/L
Sc	45		113660.225				ug/L
V	51		32066.695	37.939	1.11	2.9	ug/L
Cr	52		32996.307	39.179	0.62	1.6	ug/L
Cr	53		17778.536	61.996	1.32	2.1	ug/L
Mn	55		145496.615	98.878	2.11	2.1	ug/L
Co	59		35731.479	38.543	0.67	1.7	ug/L
Ni	60		18309.443	96.755	0.71	0.7	ug/L
Cu	63		37686.108	105.256	1.36	1.3	ug/L
Cu	65		17612.812	105.532	1.03	1.0	ug/L
Zn	66		10705.781	102.828	1.13	1.1	ug/L
Zn	68		7616.102	103.132	2.07	2.0	ug/L
Ge	72		96183.346				ug/L
As	75		10647.432	98.484	1.73	1.8	ug/L
Se	77		1777.039	109.995	7.49	6.8	ug/L
Se	82		1552.927	100.705	3.40	3.4	ug/L
Sr	88		34316.052	8.706	0.17	1.9	ug/L
Mo	98		18675.214	39.185	0.42	1.1	ug/L
Rh	103		106398.885				ug/L
Ag	107		39743.071	40.084	0.58	1.4	ug/L
Cd	111		9438.857	37.708	0.92	2.4	ug/L
Cd	114		22881.355	38.362	0.51	1.3	ug/L
In	115		167643.274				ug/L
Sn	120		44179.173	39.263	0.32	0.8	ug/L
Sb	121		28956.406	37.506	0.31	0.8	ug/L
Ba	137		17930.103	40.118	0.34	0.8	ug/L
Ba	138		113049.225	40.232	0.37	0.9	ug/L
Tb	159		246725.067				ug/L
Tl	205		127654.408	40.530	0.51	1.3	ug/L
Pb	208		233079.872	100.457	0.72	0.7	ug/L
Hg	200		1153.398	7.395	0.04	0.6	ug/L
Hg	201		678.030	7.747	0.45	5.8	ug/L
Bi	209		181524.964				ug/L
U	238		258311.501	39.124	0.14	0.4	ug/L
C	13		280.005				ug/L
W	184		3.333				ug/L
Pd	106		-33.696				ug/L
Kr	83		7.500				ug/L
Na	23		2672557.578	4935.589	450.52	9.1	ug/L
Mg	24		1533607.004	4648.107	670.60	14.4	ug/L

	K	39	2052068.869	4709.747	127.45	2.7	ug/L
	Ca	44	69929.830	4613.187	86.37	1.9	ug/L
	Ti	47	20.000				ug/L
L	Sc-1	45	113660.225				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		102.937
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		95.982
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		96.411
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		101.125
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		99.903
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		94.799
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: CCV4

Sample Date/Time: Friday, July 28, 2017 10:27:10

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 5

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9	773.039		42.009	2.82	6.7	ug/L
	B	11	17921.041		496.013	37.13	7.5	ug/L
	Al	27	57867.135		104.470	4.14	4.0	ug/L
>	Sc	45	115712.815					ug/L
	V	51	32500.388		37.767	0.26	0.7	ug/L
	Cr	52	32936.708		38.407	1.07	2.8	ug/L
	Cr	53	18902.037		70.368	3.67	5.2	ug/L
	Mn	55	145947.749		97.454	3.00	3.1	ug/L
	Co	59	35684.582		37.832	1.42	3.7	ug/L
L	Ni	60	18112.967		94.100	3.59	3.8	ug/L
	Cu	63	37635.848		105.415	0.35	0.3	ug/L
	Cu	65	17564.700		105.546	1.08	1.0	ug/L
	Zn	66	10662.051		102.713	1.59	1.6	ug/L
	Zn	68	7550.038		102.523	2.48	2.4	ug/L
>	Ge	72	95907.196					ug/L
	As	75	10744.120		99.679	1.35	1.4	ug/L
	Se	77	1786.541		111.434	1.64	1.5	ug/L
	Se	82	1537.274		100.006	2.81	2.8	ug/L
L	Sr	88	34534.686		8.853	0.09	1.0	ug/L
	Mo	98	18408.826		39.064	0.55	1.4	ug/L
>	Rh	103	105223.487					ug/L
L	Ag	107	40040.608		40.831	0.22	0.5	ug/L
	Cd	111	9296.509		37.001	0.25	0.7	ug/L
	Cd	114	23007.278		38.434	0.20	0.5	ug/L
>	In	115	168236.889					ug/L
	Sn	120	45115.204		39.954	0.10	0.3	ug/L
L	Sb	121	28552.896		36.850	0.22	0.6	ug/L
	Ba	137	17768.414		40.214	0.63	1.6	ug/L
	Ba	138	111908.070		40.282	0.32	0.8	ug/L
>	Tb	159	243924.464					ug/L
	Tl	205	126647.068		40.674	0.31	0.8	ug/L
L	Pb	208	230988.512		100.702	0.21	0.2	ug/L
	Hg	200	1124.690		7.306	0.63	8.6	ug/L
	Hg	201	681.364		7.892	0.15	1.9	ug/L
>	Bi	209	179131.730					ug/L
L	U	238	252685.613		38.782	0.23	0.6	ug/L
	C	13	233.337					ug/L
	W	184	9.333					ug/L
	Pd	106	-50.011					ug/L
	Kr	83	5.500					ug/L
	Na	23	2729045.913		5040.102	431.32	8.6	ug/L
	Mg	24	1544804.527		4682.048	657.23	14.0	ug/L

K	39	2045420.867	4694.267	142.14	3.0	ug/L
Ca	44	68782.987	4537.343	131.13	2.9	ug/L
Ti	47	13.333				ug/L
Sc-1	45	115712.815				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
> Sc	45		104.796
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
> Ge	72		95.707
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
> Rh	103		95.346
Ag	107		
Cd	111		
Cd	114		
> In	115		101.483
Sn	120		
Sb	121		
Ba	137		
Ba	138		
> Tb	159		98.769
Tl	205		
Pb	208		
Hg	200		
Hg	201		
> Bi	209		93.549
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: CCV5

Sample Date/Time: Friday, July 28, 2017 10:51:49

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 5

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9	804.376		44.446	5.35	12.0	ug/L
	B	11	17822.126		502.173	41.82	8.3	ug/L
	Al	27	57731.786		106.095	3.98	3.7	ug/L
>	Sc	45	113740.532					ug/L
	V	51	31469.991		37.270	1.48	4.0	ug/L
	Cr	52	32032.231		37.969	0.58	1.5	ug/L
	Cr	53	18307.097		67.444	2.24	3.3	ug/L
	Mn	55	142150.969		96.512	1.56	1.6	ug/L
	Co	59	34609.359		37.302	0.72	1.9	ug/L
L	Ni	60	17530.958		92.588	2.15	2.3	ug/L
	Cu	63	36034.205		104.160	0.87	0.8	ug/L
	Cu	65	17113.349		106.132	1.33	1.3	ug/L
	Zn	66	10463.113		104.011	0.52	0.5	ug/L
	Zn	68	7386.211		103.505	1.04	1.0	ug/L
>	Ge	72	92938.813					ug/L
	As	75	10461.104		100.160	0.55	0.6	ug/L
	Se	77	1769.203		115.226	2.23	1.9	ug/L
	Se	82	1542.248		103.570	1.46	1.4	ug/L
L	Sr	88	33529.919		8.885	0.15	1.6	ug/L
	Mo	98	17820.478		39.054	0.14	0.4	ug/L
>	Rh	103	101880.937					ug/L
L	Ag	107	38584.544		40.637	0.62	1.5	ug/L
	Cd	111	9033.034		37.745	0.59	1.6	ug/L
	Cd	114	22067.096		38.704	0.44	1.1	ug/L
>	In	115	160240.001					ug/L
	Sn	120	42625.074		39.632	0.29	0.7	ug/L
L	Sb	121	27293.000		36.983	0.09	0.2	ug/L
	Ba	137	17070.167		39.843	0.17	0.4	ug/L
	Ba	138	107030.750		39.736	0.60	1.5	ug/L
>	Tb	159	236510.998					ug/L
	Tl	205	121232.870		40.156	0.30	0.8	ug/L
L	Pb	208	222299.067		99.956	1.13	1.1	ug/L
	Hg	200	1090.018		7.393	0.09	1.3	ug/L
	Hg	201	658.028		7.956	0.49	6.1	ug/L
>	Bi	209	171580.528					ug/L
L	U	238	244238.568		39.135	0.01	0.0	ug/L
	C	13	286.672					ug/L
	W	184	9.333					ug/L
	Pd	106	-98.133					ug/L
	Kr	83	8.667					ug/L
	Na	23	2748576.265		5076.236	364.00	7.2	ug/L
	Mg	24	1499093.596		4543.491	338.23	7.4	ug/L

K	39	2118162.303	4863.647	76.94	1.6	ug/L
Ca	44	69933.272	4613.415	124.05	2.7	ug/L
Ti	47	23.333				ug/L
Sc-1	45	113740.532				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
> Sc	45		103.010
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
> Ge	72		92.744
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
> Rh	103		92.317
Ag	107		
Cd	111		
Cd	114		
> In	115		96.659
Sn	120		
Sb	121		
Ba	137		
Ba	138		
> Tb	159		95.767
Tl	205		
Pb	208		
Hg	200		
Hg	201		
> Bi	209		89.606
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - CCB

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: CCB1

Sample Date/Time: Friday, July 28, 2017 08:32:57

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1100

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 1

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.000	-0.020	0.00	0.0	ug/L
	B	11		300.006	3.331	0.38	11.4	ug/L
	Al	27		784.040	-0.184	0.09	49.2	ug/L
>	Sc	45		111367.007				ug/L
	V	51		-2879.056	-1.786	1.09	60.9	ug/L
	Cr	52		967.394	-0.132	0.04	31.7	ug/L
	Cr	53		12005.697	1.098	4.14	377.1	ug/L
	Mn	55		260.004	0.082	0.02	21.0	ug/L
	Co	59		43.667	0.006	0.01	229.2	ug/L
L	Ni	60		35.667	0.045	0.05	115.8	ug/L
	Cu	63		17.000	0.004	0.01	196.1	ug/L
	Cu	65		8.667	0.035	0.02	61.5	ug/L
	Zn	66		27.333	-0.008	0.05	623.7	ug/L
	Zn	68		25.333	-0.015	0.06	393.0	ug/L
>	Ge	72		99829.657				ug/L
	As	75		15.958	0.303	0.55	180.2	ug/L
	Se	77		652.694	-4.005	1.75	43.8	ug/L
	Se	82		15.915	-0.073	0.16	217.7	ug/L
L	Sr	88		16301.264	0.036	0.01	37.6	ug/L
	Mo	98		51.635	0.055	0.04	74.9	ug/L
>	Rh	103		110476.503				ug/L
L	Ag	107		10.000	0.004	0.01	136.3	ug/L
	Cd	111		1.030	0.007	0.01	124.3	ug/L
	Cd	114		1.191	-0.005	0.00	34.1	ug/L
>	In	115		167326.971				ug/L
	Sn	120		196.669	0.071	0.02	22.8	ug/L
L	Sb	121		172.669	-0.162	0.04	26.1	ug/L
	Ba	137		19.318	0.019	0.01	62.9	ug/L
	Ba	138		115.986	0.016	0.00	29.2	ug/L
>	Tb	159		244331.317				ug/L
	Tl	205		128.668	-0.004	0.00	56.0	ug/L
L	Pb	208		34.000	0.009	0.01	58.9	ug/L
	Hg	200		9.303	0.054	0.02	34.8	ug/L
	Hg	201		6.000	0.050	0.04	75.2	ug/L
>	Bi	209		190623.407				ug/L
L	U	238		122.668	0.016	0.01	40.6	ug/L
	C	13		226.670				ug/L
	W	184		4.667				ug/L
	Pd	106		0.406				ug/L
	Kr	83		9.833				ug/L
	Na	23		4814.858	-3.580	1.20	33.4	ug/L
	Mg	24		286.674	0.384	0.64	166.4	ug/L

	K	39	28780.442	-5.619	2.11	37.6	ug/L
	Ca	44	140.001	-0.212	1.91	900.0	ug/L
	Ti	47	16.667				ug/L
L	Sc-1	45	111367.007				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		104.577
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		106.217
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		106.215
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		106.851
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		105.049
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		106.999
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999997	Linear Thru Zero
B	11.009	0.000317	0.000	0.999983	Linear Thru Zero
Al	26.982	0.004799	0.000	0.999855	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007686	0.000	0.999942	Linear Thru Zero
Cr	51.941	0.007032	0.000	0.999976	Linear Thru Zero
Cr	52.941	0.000864	0.000	0.993973	Linear Thru Zero
Mn	54.938	0.012626	0.000	0.999984	Linear Thru Zero
Co	58.933	0.007927	0.000	0.999963	Linear Thru Zero
Ni	59.933	0.001615	0.000	0.999940	Linear Thru Zero
Cu	62.930	0.003809	0.000	0.999984	Linear Thru Zero
Cu	64.928	0.001769	0.000	0.999973	Linear Thru Zero
Zn	65.926	0.001100	0.000	0.999988	Linear Thru Zero
Zn	67.925	0.000782	0.000	0.999968	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001133	0.000	0.999943	Linear Thru Zero
Se	76.920	0.000111	0.000	0.999834	Linear Thru Zero
Se	81.917	0.000161	0.000	0.999927	Linear Thru Zero
Sr	87.906	0.023021	0.000	0.999972	Linear Thru Zero
Mo	97.906	0.004458	0.000	0.999951	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009287	0.000	0.999995	Linear Thru Zero
Cd	110.904	0.001503	0.000	0.999984	Linear Thru Zero
Cd	113.904	0.003549	0.000	0.999984	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006762	0.000	0.999985	Linear Thru Zero
Sb	120.904	0.004470	0.000	0.999994	Linear Thru Zero
Ba	136.905	0.001793	0.000	0.999992	Linear Thru Zero
Ba	137.905	0.011248	0.000	0.999999	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012809	0.000	0.999997	Linear Thru Zero
Pb	207.977	0.009379	0.000	0.999988	Linear Thru Zero
Hg	199.968	0.000833	0.000	0.999926	Linear Thru Zero
Hg	200.970	0.000477	0.000	0.999860	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036360	0.000	0.999863	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	549.721525	0.000	0.999711	Linear Thru Zero
Mg	23.985	330.162224	0.000	0.999948	Linear Thru Zero
K	38.964	430.005796	0.000	0.999699	Linear Thru Zero
Ca	43.956	15.718796	0.000	0.999853	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: CCB2

Sample Date/Time: Friday, July 28, 2017 09:04:06

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 1

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.000	-0.019	0.00	0.0	ug/L
	B	11		322.007	3.163	0.99	31.3	ug/L
	Al	27		519.351	-0.243	0.10	41.7	ug/L
>	Sc	45		105918.696				ug/L
	V	51		-2812.449	-1.006	0.37	36.4	ug/L
	Cr	52		953.226	0.027	0.02	66.8	ug/L
	Cr	53		11646.313	6.568	5.31	80.8	ug/L
	Mn	55		219.337	-0.008	0.02	308.0	ug/L
	Co	59		39.000	-0.010	0.01	118.6	ug/L
L	Ni	60		35.000	0.038	0.03	70.1	ug/L
	Cu	63		11.667	-0.005	0.00	87.1	ug/L
	Cu	65		6.000	0.007	0.03	428.4	ug/L
	Zn	66		31.000	-0.004	0.03	894.8	ug/L
	Zn	68		24.000	0.060	0.03	47.1	ug/L
>	Ge	72		96395.460				ug/L
	As	75		-1.209	0.057	0.14	238.3	ug/L
	Se	77		646.694	1.102	1.02	92.3	ug/L
	Se	82		12.429	0.043	0.23	550.9	ug/L
L	Sr	88		15798.208	0.070	0.11	162.3	ug/L
	Mo	98		48.854	0.075	0.05	61.3	ug/L
>	Rh	103		108515.453				ug/L
L	Ag	107		9.333	0.005	0.00	79.0	ug/L
	Cd	111		6.183	0.028	0.01	42.2	ug/L
	Cd	114		5.834	0.002	0.01	333.8	ug/L
>	In	115		165780.977				ug/L
	Sn	120		243.295	0.114	0.06	50.2	ug/L
L	Sb	121		160.668	0.062	0.04	70.6	ug/L
	Ba	137		13.991	-0.004	0.01	140.8	ug/L
	Ba	138		86.658	-0.006	0.01	143.3	ug/L
>	Tb	159		243790.944				ug/L
	Tl	205		109.667	0.020	0.00	21.2	ug/L
L	Pb	208		31.667	0.010	0.00	34.0	ug/L
	Hg	200		14.645	0.038	0.02	45.3	ug/L
	Hg	201		12.000	0.110	0.10	89.6	ug/L
>	Bi	209		188365.638				ug/L
L	U	238		101.001	0.011	0.00	18.0	ug/L
	C	13		206.670				ug/L
	W	184		3.332				ug/L
	Pd	106		4.341				ug/L
	Kr	83		8.167				ug/L
	Na	23		4447.967	-0.864	1.08	124.9	ug/L
	Mg	24		233.337	0.182	0.26	145.6	ug/L

	K	39	28191.585	-2.898	1.59	55.0	ug/L
	Ca	44	150.001	-1.543	1.75	113.4	ug/L
	Ti	47	6.667				ug/L
L	Sc-1	45	105918.696				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		95.926
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		96.194
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		98.329
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		100.002
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		98.715
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		98.371
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: CCB3

Sample Date/Time: Friday, July 28, 2017 09:44:42

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 1

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.000	-0.019	0.00	0.0	ug/L
	B	11		312.006	2.184	0.40	18.4	ug/L
	Al	27		744.703	0.099	0.07	66.1	ug/L
>	Sc	45		113931.409				ug/L
	V	51		-2565.232	-0.508	0.56	109.3	ug/L
	Cr	52		1033.903	0.038	0.05	125.0	ug/L
	Cr	53		13261.088	14.254	4.11	28.8	ug/L
	Mn	55		155.335	-0.063	0.01	15.7	ug/L
	Co	59		23.667	-0.029	0.00	4.8	ug/L
L	Ni	60		25.333	-0.028	0.03	98.5	ug/L
	Cu	63		21.000	0.020	0.00	21.4	ug/L
	Cu	65		9.333	0.026	0.00	14.9	ug/L
	Zn	66		44.667	0.120	0.08	70.3	ug/L
	Zn	68		38.000	0.240	0.11	46.5	ug/L
>	Ge	72		98076.649				ug/L
	As	75		-24.366	-0.153	0.24	157.4	ug/L
	Se	77		688.698	3.986	2.80	70.2	ug/L
	Se	82		18.451	0.415	0.38	91.3	ug/L
L	Sr	88		16436.211	0.233	0.08	33.1	ug/L
	Mo	98		67.895	0.112	0.06	50.4	ug/L
>	Rh	103		109754.138				ug/L
L	Ag	107		4.000	0.000	0.01	33578.7	ug/L
	Cd	111		3.333	0.016	0.01	57.5	ug/L
	Cd	114		6.973	0.004	0.01	300.3	ug/L
>	In	115		170620.067				ug/L
	Sn	120		222.003	0.090	0.05	59.7	ug/L
L	Sb	121		128.668	0.016	0.04	227.2	ug/L
	Ba	137		9.323	-0.015	0.01	67.6	ug/L
	Ba	138		70.657	-0.012	0.00	42.0	ug/L
>	Tb	159		245695.565				ug/L
	Tl	205		93.001	0.014	0.00	31.4	ug/L
L	Pb	208		27.667	0.008	0.00	60.0	ug/L
	Hg	200		10.645	0.013	0.04	300.8	ug/L
	Hg	201		3.333	0.015	0.01	84.2	ug/L
>	Bi	209		188622.734				ug/L
L	U	238		93.001	0.010	0.00	34.5	ug/L
	C	13		146.668				ug/L
	W	184		3.333				ug/L
	Pd	106		-0.326				ug/L
	Kr	83		5.667				ug/L
	Na	23		3374.078	-2.851	0.59	20.8	ug/L
	Mg	24		253.338	0.243	0.32	132.5	ug/L

K	39	26659.455	-6.466	0.75	11.6	ug/L
Ca	44	176.669	0.220	2.32	1053.6	ug/L
Ti	47	6.667				ug/L
Sc-1	45	113931.409				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
> Sc	45		103.182
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
> Ge	72		97.872
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
> Rh	103		99.452
Ag	107		
Cd	111		
Cd	114		
> In	115		102.921
Sn	120		
Sb	121		
Ba	137		
Ba	138		
> Tb	159		99.486
Tl	205		
Pb	208		
Hg	200		
Hg	201		
> Bi	209		98.506
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: CCB4

Sample Date/Time: Friday, July 28, 2017 10:30:38

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 1

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.000	-0.019	0.00	0.0	ug/L
	B	11		360.009	3.403	1.81	53.2	ug/L
	Al	27		711.366	0.021	0.10	459.1	ug/L
>	Sc	45		115315.113				ug/L
	V	51		-3193.938	-1.145	1.35	117.5	ug/L
	Cr	52		1019.401	0.006	0.04	785.6	ug/L
	Cr	53		13987.541	20.089	3.36	16.7	ug/L
	Mn	55		169.335	-0.055	0.01	13.9	ug/L
	Co	59		19.000	-0.035	0.00	7.9	ug/L
L	Ni	60		24.667	-0.033	0.03	87.6	ug/L
	Cu	63		14.333	0.002	0.01	283.1	ug/L
	Cu	65		8.000	0.019	0.01	32.6	ug/L
	Zn	66		46.333	0.141	0.09	62.6	ug/L
	Zn	68		43.000	0.315	0.11	34.5	ug/L
>	Ge	72		96749.115				ug/L
	As	75		21.003	0.261	0.23	86.6	ug/L
	Se	77		701.365	6.101	2.17	35.6	ug/L
	Se	82		21.291	0.613	0.07	10.9	ug/L
L	Sr	88		16440.553	0.339	0.10	29.7	ug/L
	Mo	98		55.228	0.088	0.02	28.6	ug/L
>	Rh	103		109059.096				ug/L
L	Ag	107		7.333	0.003	0.00	91.3	ug/L
	Cd	111		0.509	0.005	0.00	70.0	ug/L
	Cd	114		9.803	0.009	0.01	147.2	ug/L
>	In	115		170695.537				ug/L
	Sn	120		535.329	0.367	0.23	63.2	ug/L
L	Sb	121		135.335	0.024	0.04	173.1	ug/L
	Ba	137		11.656	-0.009	0.01	76.6	ug/L
	Ba	138		57.323	-0.016	0.00	12.8	ug/L
>	Tb	159		242361.469				ug/L
	Tl	205		101.001	0.017	0.01	36.2	ug/L
L	Pb	208		33.333	0.010	0.00	18.7	ug/L
	Hg	200		16.641	0.050	0.06	122.8	ug/L
	Hg	201		10.667	0.095	0.13	133.2	ug/L
>	Bi	209		187845.426				ug/L
L	U	238		109.668	0.012	0.01	45.3	ug/L
	C	13		220.004				ug/L
	W	184		4.000				ug/L
	Pd	106		0.667				ug/L
	Kr	83		4.833				ug/L
	Na	23		3027.265	-3.492	0.44	12.6	ug/L
	Mg	24		253.338	0.243	0.15	61.7	ug/L

	K	39	25241.392	-9.768	2.42	24.7	ug/L
	Ca	44	196.669	1.543	1.01	65.5	ug/L
	Ti	47	10.000				ug/L
L	Sc-1	45	115315.113				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		104.436
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		96.547
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		98.822
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		102.966
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		98.136
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		98.100
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: CCB5

Sample Date/Time: Friday, July 28, 2017 10:55:18

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 1

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.000	-0.019	0.00	0.0	ug/L
	B	11		354.675	3.576	1.53	42.7	ug/L
	Al	27		863.383	0.348	0.22	63.8	ug/L
>	Sc	45		111714.896				ug/L
	V	51		-3017.397	-1.075	0.42	39.1	ug/L
	Cr	52		989.564	0.007	0.01	191.8	ug/L
	Cr	53		13632.071	21.074	7.07	33.6	ug/L
	Mn	55		144.001	-0.068	0.01	17.8	ug/L
	Co	59		21.333	-0.031	0.01	36.5	ug/L
L	Ni	60		24.667	-0.029	0.01	40.9	ug/L
	Cu	63		16.000	0.008	0.01	81.9	ug/L
	Cu	65		7.000	0.014	0.01	75.0	ug/L
	Zn	66		42.667	0.117	0.04	37.0	ug/L
	Zn	68		38.667	0.271	0.07	25.9	ug/L
>	Ge	72		94216.897				ug/L
	As	75		-49.557	-0.412	0.55	133.9	ug/L
	Se	77		683.697	6.228	2.48	39.9	ug/L
	Se	82		21.141	0.642	0.11	16.6	ug/L
L	Sr	88		15756.126	0.221	0.24	107.5	ug/L
	Mo	98		54.078	0.092	0.05	51.2	ug/L
>	Rh	103		103940.185				ug/L
L	Ag	107		10.667	0.007	0.00	67.9	ug/L
	Cd	111		0.303	0.004	0.00	111.3	ug/L
	Cd	114		2.822	-0.003	0.00	150.9	ug/L
>	In	115		162570.181				ug/L
	Sn	120		251.970	0.128	0.07	54.9	ug/L
L	Sb	121		119.334	0.011	0.01	113.1	ug/L
	Ba	137		11.661	-0.008	0.00	25.4	ug/L
	Ba	138		57.995	-0.015	0.00	13.9	ug/L
>	Tb	159		232359.228				ug/L
	Tl	205		88.334	0.014	0.01	52.0	ug/L
L	Pb	208		36.333	0.012	0.00	17.7	ug/L
	Hg	200		15.987	0.051	0.05	102.9	ug/L
	Hg	201		10.667	0.102	0.05	45.3	ug/L
>	Bi	209		178607.137				ug/L
L	U	238		93.001	0.011	0.01	50.0	ug/L
	C	13		213.336				ug/L
	W	184		2.000				ug/L
	Pd	106		1.333				ug/L
	Kr	83		3.000				ug/L
	Na	23		7737.302	5.222	2.51	48.0	ug/L
	Mg	24		640.027	1.415	0.20	14.1	ug/L

K	39	26773.207	-6.201	1.89	30.5	ug/L
Ca	44	156.668	-1.102	2.32	210.7	ug/L
Ti	47	10.000				ug/L
Sc-1	45	111714.896				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
> Sc	45		101.175
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
> Ge	72		94.020
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
> Rh	103		94.183
Ag	107		
Cd	111		
Cd	114		
> In	115		98.065
Sn	120		
Sb	121		
Ba	137		
Ba	138		
> Tb	159		94.086
Tl	205		
Pb	208		
Hg	200		
Hg	201		
> Bi	209		93.275
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Instrument Tuning

Sample Information

Sample Date/Time: Friday, July 28, 2017 06:09:45

Method File: C:\Elandata\Method\BC Methods\BC-Tuning.mth

Dataset File: C:\Elandata\Dataset\Default\Mass Calibration and Resolution - Retry 1.865

Tuning File: C:\Elandata\Tuning\default.tun

Number of Sweeps: 35

Number of Readings: 1

Number of Replicates: 5

Measurement Unit: cps

Instrument Tuning Report

File Name: default.tun

File Path: C:\Elandata\Tuning\default.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Li	7.016	7.077	1551	2097	0.686	
Mg	23.985	23.978	5662	2106	0.709	
Rh	102.905	102.928	24827	2267	0.714	
Ce	139.905	139.928	33776	2352	0.690	
Pb	207.977	208.029	50315	2505	0.694	
U	238.050	238.078	57617	2560	0.707	

Report Date/Time: Friday, July 28, 2017 06:11:29

Page 1

Daily Performance Report

Sample ID: Daily Performance Check

Sample Date/Time: Friday, July 28, 2017 06:21:20

Sample Description:

Method File: C:\Elandata\Method\BC Methods\BC_Daily Performance.mth

Dataset File: C:\Elandata\Dataset\Default\Daily Performance Check.867

Tuning File: C:\Elandata\Tuning\default.tun

Optimization File: C:\Elandata\Optimize\Default.dac

Dual Detector Mode: Dual

Acq. Dead Time(ns): 65

Current Dead Time (ns): 65

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD
Mg	24.0		4757.8		4757.791		97.425		2.0
In	114.9		41875.8		41875.810		454.544		1.1
U	238.1		90242.8		90242.757		628.200		0.7
[> Ba	137.9		44430.3		44430.295		457.167		1.0
[Ba++	69.0		301.5		0.007		0.000		4.0
[> Ce	139.9		52867.1		52867.135		351.194		0.7
[CeO	155.9		1414.4		0.027		0.001		3.4
220	220.0		0.2		0.160		0.219		136.9
8.5	8.5		0.2		0.160		0.219		136.9

Current Optimization File Data

Current Value	Description
0.83	Nebulizer Gas Flow [NEB]
1.20	Auxiliary Gas Flow
15.00	Plasma Gas Flow
6.50	Lens Voltage
1200.00	ICP RF Power
-1900.00	Analog Stage Voltage
1350.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset Std [QRO]
-10.00	Cell Rod Offset Std [CRO]
60.00	Discriminator Threshold
-21.00	Cell Path Voltage Std [CPV]
0.00	RPa
0.25	RPq
0.98	DRC Mode NEB
-8.00	DRC Mode QRO
-2.00	DRC Mode CRO
-25.00	DRC Mode CPV
0.00	Cell Gas A
0.00	Cell Gas B
210.00	RF Voltage
0.00	DC Voltage
60.00	Service DAC 1
450.00	Axial Field Voltage

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
C	12	69	5.0	71060.0
Mg	24	69	5.0	12156.3
In	115	69	6.5	42986.4
Ce	140	69	7.0	47023.3
Pb	208	69	7.8	34343.2

Sample ID: Daily Performance Check

Report Date/Time: Friday, July 28, 2017 06:23:05

Page 1



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Method Blank

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: B[G2277-BLK1

Sample Date/Time: Friday, July 28, 2017 09:56:02

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 102

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.667	0.018	0.03	180.4	ug/L
	B	11		327.340	2.629	0.75	28.4	ug/L
	Al	27		1530.820	1.564	0.12	7.9	ug/L
>	Sc	45		113676.138				ug/L
	V	51		-3090.026	-1.118	1.11	99.5	ug/L
	Cr	52		1068.741	0.083	0.03	35.5	ug/L
	Cr	53		13385.807	15.887	3.60	22.7	ug/L
	Mn	55		199.336	-0.032	0.01	39.4	ug/L
	Co	59		28.333	-0.024	0.00	19.8	ug/L
L	Ni	60		41.000	0.053	0.07	125.6	ug/L
	Cu	63		42.667	0.077	0.01	10.0	ug/L
	Cu	65		22.333	0.100	0.03	25.8	ug/L
	Zn	66		199.669	1.550	0.09	5.8	ug/L
	Zn	68		136.668	1.519	0.24	15.8	ug/L
>	Ge	72		99910.165				ug/L
	As	75		77.647	0.759	0.54	71.3	ug/L
	Se	77		705.532	4.389	1.48	33.6	ug/L
	Se	82		20.955	0.548	0.06	10.9	ug/L
L	Sr	88		16728.170	0.228	0.12	50.7	ug/L
	Mo	98		63.635	0.101	0.06	58.7	ug/L
>	Rh	103		112004.212				ug/L
L	Ag	107		8.000	0.004	0.00	88.3	ug/L
	Cd	111		-0.255	0.002	0.01	655.2	ug/L
	Cd	114		7.998	0.005	0.01	119.4	ug/L
>	In	115		171457.519				ug/L
	Sn	120		229.303	0.095	0.05	51.6	ug/L
L	Sb	121		134.668	0.022	0.06	253.8	ug/L
	Ba	137		18.981	0.006	0.01	192.9	ug/L
	Ba	138		124.649	0.007	0.00	72.6	ug/L
>	Tb	159		249771.284				ug/L
	Tl	205		127.334	0.024	0.01	23.6	ug/L
L	Pb	208		41.333	0.013	0.01	47.1	ug/L
	Hg	200		14.628	0.036	0.03	81.6	ug/L
	Hg	201		12.000	0.109	0.04	36.1	ug/L
>	Bi	209		192136.668				ug/L
L	U	238		162.335	0.020	0.01	40.7	ug/L
	C	13		226.670				ug/L
	W	184		5.999				ug/L
	Pd	106		0.602				ug/L
	Kr	83		5.167				ug/L
	Na	23		4794.839	-0.222	0.95	429.6	ug/L
	Mg	24		260.005	0.263	0.24	91.6	ug/L

K	39	29476.411	0.094	2.34	2504.3	ug/L
Ca	44	250.004	5.070	6.06	119.5	ug/L
Ti	47	23.333				ug/L
Sc-1	45	113676.138				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
> Sc	45		102.951
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
> Ge	72		99.701
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
> Rh	103		101.490
Ag	107		
Cd	111		
Cd	114		
> In	115		103.426
Sn	120		
Sb	121		
Ba	137		
Ba	138		
> Tb	159		101.137
Tl	205		
Pb	208		
Hg	200		
Hg	201		
> Bi	209		100.341
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Duplicate

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: B[G2277-DUP1

Sample Date/Time: Friday, July 28, 2017 10:02:56

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 104

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.333	0.000	0.03	7261.9	ug/L
	B	11		242.671	0.982	1.17	119.5	ug/L
	Al	27		464.014	-0.324	0.12	37.5	ug/L
>	Sc	45		102023.183				ug/L
	V	51		-729.569	1.418	0.63	44.6	ug/L
	Cr	52		871.216	-0.036	0.04	115.8	ug/L
	Cr	53		4028.555	-77.681	0.87	1.1	ug/L
	Mn	55		186.669	-0.026	0.01	46.4	ug/L
	Co	59		19.333	-0.032	0.01	21.6	ug/L
L	Ni	60		28.333	0.006	0.03	452.3	ug/L
	Cu	63		608.357	1.623	0.03	2.1	ug/L
	Cu	65		273.672	1.574	0.09	5.6	ug/L
	Zn	66		1947.580	18.017	0.42	2.4	ug/L
	Zn	68		1385.125	18.096	0.20	1.1	ug/L
>	Ge	72		98495.027				ug/L
	As	75		12.424	0.178	0.20	112.2	ug/L
	Se	77		232.837	-39.120	0.39	1.0	ug/L
	Se	82		4.442	-0.487	0.05	10.7	ug/L
L	Sr	88		16060.752	0.031	0.05	163.9	ug/L
	Mo	98		20.374	0.017	0.02	129.7	ug/L
>	Rh	103		107822.551				ug/L
L	Ag	107		5.333	0.001	0.00	157.5	ug/L
	Cd	111		1.745	0.010	0.01	69.0	ug/L
	Cd	114		1.451	-0.005	0.01	179.2	ug/L
>	In	115		168269.874				ug/L
	Sn	120		169.327	0.045	0.04	78.8	ug/L
L	Sb	121		42.667	-0.094	0.01	12.4	ug/L
	Ba	137		128.318	0.253	0.02	6.4	ug/L
	Ba	138		787.357	0.245	0.01	3.6	ug/L
>	Tb	159		245119.601				ug/L
	Tl	205		17.667	-0.010	0.00	24.7	ug/L
L	Pb	208		27.000	0.008	0.00	24.3	ug/L
	Hg	200		5.936	-0.018	0.03	180.1	ug/L
	Hg	201		4.000	0.021	0.04	176.6	ug/L
>	Bi	209		195024.748				ug/L
L	U	238		10.000	-0.002	0.00	28.7	ug/L
	C	13		206.670				ug/L
	W	184		9.998				ug/L
	Pd	106		0.406				ug/L
	Kr	83		6.667				ug/L
	Na	23		102779.378	181.066	17.88	9.9	ug/L
	Mg	24		883.384	2.152	0.29	13.7	ug/L

	K	39	27716.652	-4.004	4.22	105.5	ug/L
	Ca	44	523.352	23.148	7.37	31.9	ug/L
	Ti	47	10.000				ug/L
L	Sc-1	45	102023.183				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		92.398
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		98.289
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		97.701
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		101.503
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		99.253
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		101.849
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Matrix Spike

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: B[G2277-MS1

Sample Date/Time: Friday, July 28, 2017 10:09:51

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 106

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		743.036	43.851	4.35	9.9	ug/L
	B	11		15422.191	463.906	22.27	4.8	ug/L
	Al	27		157533.880	311.823	6.62	2.1	ug/L
>	Sc	45		106457.036				ug/L
	V	51		30587.822	38.594	0.42	1.1	ug/L
	Cr	52		30795.221	39.034	0.44	1.1	ug/L
	Cr	53		8845.918	-25.560	2.16	8.4	ug/L
	Mn	55		139030.582	100.856	0.99	1.0	ug/L
	Co	59		34727.591	39.993	0.58	1.5	ug/L
L	Ni	60		17746.458	100.150	1.43	1.4	ug/L
	Cu	63		39233.848	108.443	1.02	0.9	ug/L
	Cu	65		18305.096	108.559	1.79	1.7	ug/L
	Zn	66		14991.934	142.636	0.56	0.4	ug/L
	Zn	68		10621.332	142.414	0.75	0.5	ug/L
>	Ge	72		97186.989				ug/L
	As	75		11761.002	107.674	2.17	2.0	ug/L
	Se	77		1622.338	93.534	1.08	1.2	ug/L
	Se	82		1964.195	126.292	0.67	0.5	ug/L
L	Sr	88		17011.128	0.568	0.13	22.6	ug/L
	Mo	98		17069.567	35.447	0.99	2.8	ug/L
>	Rh	103		107489.861				ug/L
L	Ag	107		40195.451	40.120	0.56	1.4	ug/L
	Cd	111		10811.703	43.187	0.54	1.2	ug/L
	Cd	114		25394.152	42.571	0.21	0.5	ug/L
>	In	115		167643.590				ug/L
	Sn	120		35882.937	31.839	3.39	10.6	ug/L
L	Sb	121		29458.986	38.157	0.34	0.9	ug/L
	Ba	137		17763.901	41.050	0.22	0.5	ug/L
	Ba	138		112518.875	41.355	0.42	1.0	ug/L
>	Tb	159		238899.601				ug/L
	Tl	205		125686.198	41.211	0.34	0.8	ug/L
L	Pb	208		233494.390	103.924	1.17	1.1	ug/L
	Hg	200		1786.793	10.964	0.53	4.8	ug/L
	Hg	201		1049.405	11.461	0.16	1.4	ug/L
>	Bi	209		190160.242				ug/L
L	U	238		243983.397	35.278	0.25	0.7	ug/L
	C	13		186.669				ug/L
	W	184		12.667				ug/L
	Pd	106		-71.508				ug/L
	Kr	83		6.667				ug/L
	Na	23		149968.923	268.374	25.21	9.4	ug/L
	Mg	24		2323.688	6.518	0.94	14.4	ug/L

	K	39	30594.088	2.696	2.13	79.0	ug/L
	Ca	44	1453.471	84.659	8.16	9.6	ug/L
	Ti	47	36.667				ug/L
L	Sc-1	45	106457.036				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		96.413
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		96.984
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		97.400
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		101.125
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		96.735
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		99.309
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Raw Data - Matrix Spike Duplicate

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: B[G2277-MSD1

Sample Date/Time: Friday, July 28, 2017 10:13:19

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 107

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		785.707	46.210	4.69	10.1	ug/L
	B	11		17302.222	519.140	33.53	6.5	ug/L
	Al	27		165077.794	325.496	8.96	2.8	ug/L
>	Sc	45		106881.215				ug/L
	V	51		30583.403	38.447	0.60	1.6	ug/L
	Cr	52		30106.644	37.979	0.65	1.7	ug/L
	Cr	53		9169.797	-22.351	1.88	8.4	ug/L
	Mn	55		139068.678	100.499	2.29	2.3	ug/L
	Co	59		33941.052	38.937	0.90	2.3	ug/L
L	Ni	60		17340.528	97.459	1.31	1.3	ug/L
	Cu	63		38092.091	109.479	0.74	0.7	ug/L
	Cu	65		17778.856	109.628	0.71	0.6	ug/L
	Zn	66		14468.595	143.140	1.22	0.9	ug/L
	Zn	68		10399.692	145.007	0.76	0.5	ug/L
>	Ge	72		93465.745				ug/L
	As	75		11120.638	105.864	0.55	0.5	ug/L
	Se	77		1575.661	95.053	2.82	3.0	ug/L
	Se	82		1873.816	125.290	4.47	3.6	ug/L
L	Sr	88		16762.244	0.760	0.02	2.9	ug/L
	Mo	98		16467.429	35.622	0.28	0.8	ug/L
>	Rh	103		103202.390				ug/L
L	Ag	107		39029.437	40.579	0.11	0.3	ug/L
	Cd	111		10147.367	41.792	0.65	1.6	ug/L
	Cd	114		24592.014	42.512	0.39	0.9	ug/L
>	In	115		162575.908				ug/L
	Sn	120		36613.217	33.538	2.46	7.3	ug/L
L	Sb	121		27593.402	36.852	0.06	0.2	ug/L
	Ba	137		16954.091	40.555	0.29	0.7	ug/L
	Ba	138		106707.519	40.596	0.38	0.9	ug/L
>	Tb	159		230784.166				ug/L
	Tl	205		120286.528	40.831	0.25	0.6	ug/L
L	Pb	208		221238.769	101.943	0.46	0.5	ug/L
	Hg	200		1705.471	10.994	0.35	3.2	ug/L
	Hg	201		1012.067	11.615	0.94	8.1	ug/L
>	Bi	209		180939.305				ug/L
L	U	238		229848.815	34.924	0.15	0.4	ug/L
	C	13		206.670				ug/L
	W	184		8.000				ug/L
	Pd	106		-86.547				ug/L
	Kr	83		9.333				ug/L
	Na	23		154927.171	277.548	14.46	5.2	ug/L
	Mg	24		2196.986	6.134	1.14	18.6	ug/L

	K	39	30399.974	2.244	1.66	74.0	ug/L
	Ca	44	1530.152	89.730	4.58	5.1	ug/L
	Ti	47	46.667				ug/L
L	Sc-1	45	106881.215				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		96.797
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		93.270
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		93.515
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		98.068
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		93.448
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		94.493
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Lab Control Sample

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: B[G2277-BS1

Sample Date/Time: Friday, July 28, 2017 09:52:34

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 101

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9	804.709		42.937	3.00	7.0	ug/L
	B	11	18527.216		503.500	47.65	9.5	ug/L
	Al	27	185231.383		331.243	10.08	3.0	ug/L
>	Sc	45	117832.572					ug/L
	V	51	33330.871		38.061	1.51	4.0	ug/L
	Cr	52	34398.095		39.412	0.84	2.1	ug/L
	Cr	53	18747.024		65.134	2.98	4.6	ug/L
	Mn	55	151866.991		99.557	2.34	2.4	ug/L
	Co	59	37355.849		38.871	0.68	1.8	ug/L
L	Ni	60	18882.816		96.347	4.29	4.5	ug/L
	Cu	63	40153.870		107.818	1.28	1.2	ug/L
	Cu	65	18956.332		109.200	1.69	1.5	ug/L
	Zn	66	11411.126		105.385	1.69	1.6	ug/L
	Zn	68	7991.483		104.025	1.56	1.5	ug/L
>	Ge	72	100046.415					ug/L
	As	75	11042.606		98.213	1.33	1.4	ug/L
	Se	77	1812.714		106.728	2.24	2.1	ug/L
	Se	82	1645.456		102.640	2.21	2.2	ug/L
L	Sr	88	17656.246		0.632	0.16	25.9	ug/L
	Mo	98	18566.756		37.647	0.29	0.8	ug/L
>	Rh	103	110110.482					ug/L
L	Ag	107	42007.056		40.935	0.31	0.8	ug/L
	Cd	111	10019.639		39.200	0.90	2.3	ug/L
	Cd	114	23905.980		39.254	0.33	0.8	ug/L
>	In	115	171165.554					ug/L
	Sn	120	45851.568		39.912	0.47	1.2	ug/L
L	Sb	121	29420.159		37.322	0.49	1.3	ug/L
	Ba	137	18681.726		42.156	0.51	1.2	ug/L
	Ba	138	116831.745		41.931	0.73	1.8	ug/L
>	Tb	159	244653.728					ug/L
	Tl	205	131847.693		42.219	0.31	0.7	ug/L
L	Pb	208	243646.850		105.905	0.60	0.6	ug/L
	Hg	200	1730.695		10.682	0.47	4.4	ug/L
	Hg	201	1034.070		11.364	0.42	3.7	ug/L
>	Bi	209	188985.726					ug/L
L	U	238	258662.870		37.631	0.47	1.2	ug/L
	C	13	260.004					ug/L
	W	184	26.000					ug/L
	Pd	106	-64.987					ug/L
	Kr	83	6.333					ug/L
	Na	23	40392.882		65.640	5.92	9.0	ug/L
	Mg	24	1846.890		5.073	0.62	12.1	ug/L

	K	39	30674.420	2.883	2.48	86.0	ug/L
	Ca	44	1433.467	83.336	3.99	4.8	ug/L
	Ti	47	70.000				ug/L
L	Sc-1	45	117832.572				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		106.716
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		99.837
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		99.774
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		103.250
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		99.065
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		98.695
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Serial Dilution

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: B[G2277-SRD1 @5

Sample Date/Time: Friday, July 28, 2017 10:06:24

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 105

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.000	-0.019	0.00	0.0	ug/L
	B	11		259.338	0.814	0.44	54.0	ug/L
	Al	27		822.711	0.271	0.10	35.3	ug/L
>	Sc	45		111991.959				ug/L
	V	51		-2945.212	-1.001	1.29	129.1	ug/L
	Cr	52		987.397	0.002	0.03	1342.2	ug/L
	Cr	53		11351.705	-3.657	6.07	166.1	ug/L
	Mn	55		169.335	-0.051	0.01	21.0	ug/L
	Co	59		29.000	-0.023	0.01	27.7	ug/L
L	Ni	60		25.000	-0.028	0.04	130.5	ug/L
	Cu	63		130.668	0.323	0.06	19.0	ug/L
	Cu	65		64.000	0.352	0.09	25.5	ug/L
	Zn	66		432.345	3.819	0.19	5.1	ug/L
	Zn	68		298.339	3.737	0.10	2.8	ug/L
>	Ge	72		97285.810				ug/L
	As	75		-11.140	-0.028	0.25	877.1	ug/L
	Se	77		606.191	-3.299	1.23	37.2	ug/L
	Se	82		18.277	0.420	0.39	92.8	ug/L
L	Sr	88		16367.737	0.264	0.06	20.9	ug/L
	Mo	98		16.858	0.009	0.02	200.9	ug/L
>	Rh	103		109017.455				ug/L
L	Ag	107		2.667	-0.001	0.00	232.5	ug/L
	Cd	111		0.461	0.005	0.01	114.3	ug/L
	Cd	114		-0.894	-0.009	0.01	69.5	ug/L
>	In	115		170206.231				ug/L
	Sn	120		173.951	0.047	0.02	34.2	ug/L
L	Sb	121		85.334	-0.040	0.01	19.3	ug/L
	Ba	137		36.979	0.047	0.01	13.0	ug/L
	Ba	138		192.648	0.032	0.01	24.7	ug/L
>	Tb	159		245808.564				ug/L
	Tl	205		21.667	-0.009	0.00	18.6	ug/L
L	Pb	208		11.667	0.001	0.00	115.1	ug/L
	Hg	200		3.303	-0.032	0.03	82.8	ug/L
	Hg	201		4.000	0.022	0.04	172.5	ug/L
>	Bi	209		190261.155				ug/L
L	U	238		16.000	-0.001	0.00	41.2	ug/L
	C	13		160.002				ug/L
	W	184		4.667				ug/L
	Pd	106		0.602				ug/L
	Kr	83		6.500				ug/L
	Na	23		27362.194	41.531	4.73	11.4	ug/L
	Mg	24		396.677	0.677	0.14	21.2	ug/L

	K	39	28392.373	-2.431	3.00	123.3	ug/L
	Ca	44	580.022	26.895	7.51	27.9	ug/L
	Ti	47	26.667				ug/L
L	Sc-1	45	111991.959				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		101.426
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		97.082
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		98.784
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		102.671
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		99.532
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		99.361
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Interference Check

Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: IFA1

Sample Date/Time: Friday, July 28, 2017 09:17:34

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 158

Report Filename PE_EL2_170728.TXT

Concentration Results

	Analyte	Mass	Meas. Intens.	Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
	Be	9		0.333	0.001	0.03	3212.7	ug/L
	B	11		316.673	3.007	0.72	23.9	ug/L
	Al	27		55712708.075	111417.900	3047.89	2.7	ug/L
>	Sc	45		105809.738				ug/L
	V	51		-1815.984	0.172	0.27	160.2	ug/L
	Cr	52		2256.164	1.743	0.12	7.0	ug/L
	Cr	53		12780.614	19.425	1.92	9.9	ug/L
	Mn	55		1563.493	0.976	0.08	8.7	ug/L
	Co	59		234.670	0.217	0.00	1.2	ug/L
L	Ni	60		731.035	3.995	0.07	1.7	ug/L
	Cu	63		810.376	2.861	0.10	3.4	ug/L
	Cu	65		804.375	6.137	0.26	4.3	ug/L
	Zn	66		853.714	10.221	0.60	5.8	ug/L
	Zn	68		223.003	3.609	0.29	8.1	ug/L
>	Ge	72		75168.561				ug/L
	As	75		57.126	0.744	0.06	7.8	ug/L
	Se	77		902.386	50.098	3.55	7.1	ug/L
	Se	82		-14.703	-1.995	0.40	20.2	ug/L
L	Sr	88		29475.381	10.287	0.08	0.8	ug/L
	Mo	98		810638.336	2231.136	25.66	1.1	ug/L
>	Rh	103		81174.727				ug/L
L	Ag	107		200.003	0.261	0.02	5.8	ug/L
	Cd	111		141.705	0.676	0.14	20.2	ug/L
	Cd	114		1684.821	3.355	0.14	4.1	ug/L
>	In	115		140852.167				ug/L
	Sn	120		343.324	0.259	0.02	6.7	ug/L
L	Sb	121		132.001	0.055	0.02	44.2	ug/L
	Ba	137		600.705	1.533	0.04	2.6	ug/L
	Ba	138		3759.601	1.524	0.03	1.8	ug/L
>	Tb	159		211591.305				ug/L
	Tl	205		68.667	0.010	0.00	31.3	ug/L
L	Pb	208		377.343	0.186	0.01	6.8	ug/L
	Hg	200		8.903	0.027	0.07	270.3	ug/L
	Hg	201		6.000	0.074	0.06	75.0	ug/L
>	Bi	209		131203.484				ug/L
L	U	238		40.333	0.005	0.00	43.4	ug/L
	C	13		3093.956				ug/L
	W	184		588.022				ug/L
	Pd	106		-95.798				ug/L
	Kr	83		42.500				ug/L
	Na	23		63455110.977	117393.568	7307.11	6.2	ug/L
	Mg	24		35445981.184	107442.470	5443.35	5.1	ug/L

	K	39	48347024.766	112508.625	438.99	0.4	ug/L
	Ca	44	1635173.465	108127.011	1030.75	1.0	ug/L
	Ti	47	156578.865				ug/L
L	Sc-1	45	105809.738				ug/L

QC Calculated Values

	Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
	Be	9		
	B	11		
	Al	27		
>	Sc	45		95.827
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	63		
	Cu	65		
	Zn	66		
	Zn	68		
>	Ge	72		75.011
	As	75		
	Se	77		
	Se	82		
	Sr	88		
	Mo	98		
>	Rh	103		73.555
	Ag	107		
	Cd	111		
	Cd	114		
>	In	115		84.964
	Sn	120		
	Sb	121		
	Ba	137		
	Ba	138		
>	Tb	159		85.677
	Tl	205		
	Pb	208		
	Hg	200		
	Hg	201		
>	Bi	209		68.519
	U	238		
	C	13		
	W	184		
	Pd	106		
	Kr	83		
	Na	23		
	Mg	24		
	K	39		
	Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Quantitative Analysis - Summary Report

Analyst: ARD

Instrument : ICPMS (PE-EL2)

Sample ID: IFB1

Sample Date/Time: Friday, July 28, 2017 09:22:42

Sample File: C:\Elandata\Sample\PE_EL2_170728.sam

Blank File: C:\Elandata\Dataset\2017 JUL (24-31)\Blank.1115

Number of Replicates: 3

Dual Detector Mode: Dual

Method File: C:\Elandata\Method\BC Methods\200.8-6020 Bi (U, Hg, Th) Srspeedy.mth

Autosampler Position: 159

Report Filename PE_EL2_170728.TXT

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
Be	9	2.000	0.099	0.01	5.1	ug/L
B	11	304.673	2.576	0.53	20.6	ug/L
Al	27	56276209.954	111662.420	3230.38	2.9	ug/L
> Sc	45	106601.836				ug/L
V	51	-1669.853	0.365	0.59	160.7	ug/L
Cr	52	16121.216	19.828	0.46	2.3	ug/L
Cr	53	13220.689	23.362	2.89	12.4	ug/L
Mn	55	25861.416	18.604	0.38	2.0	ug/L
Co	59	14632.908	16.804	0.45	2.7	ug/L
Ni	60	3548.819	19.871	0.32	1.6	ug/L
Cu	63	6109.761	21.649	0.23	1.1	ug/L
Cu	65	3209.336	24.425	0.82	3.3	ug/L
Zn	66	2367.698	28.681	0.13	0.5	ug/L
Zn	68	1321.780	22.527	0.42	1.9	ug/L
> Ge	72	75693.424				ug/L
As	75	1725.891	20.351	0.78	3.8	ug/L
Se	77	823.211	39.664	1.45	3.7	ug/L
Se	82	-0.945	-0.842	0.38	45.3	ug/L
Sr	88	29708.946	10.306	0.19	1.9	ug/L
Mo	98	824639.919	2258.896	12.32	0.5	ug/L
> Rh	103	81564.235				ug/L
Ag	107	14607.857	19.219	0.39	2.0	ug/L
Cd	111	3861.439	18.148	0.21	1.1	ug/L
Cd	114	10424.876	20.557	0.51	2.5	ug/L
> In	115	142489.836				ug/L
Sn	120	299.972	0.209	0.01	7.0	ug/L
Sb	121	150.668	0.081	0.00	0.9	ug/L
Ba	137	634.736	1.609	0.07	4.3	ug/L
Ba	138	3926.379	1.581	0.02	1.5	ug/L
> Tb	159	213222.336				ug/L
Tl	205	45.333	0.001	0.00	380.5	ug/L
Pb	208	771.039	0.380	0.02	5.4	ug/L
Hg	200	15.177	0.081	0.05	56.0	ug/L
Hg	201	4.000	0.042	0.08	202.7	ug/L
> Bi	209	132789.794				ug/L
U	238	45.667	0.006	0.00	14.6	ug/L
C	13	3254.025				ug/L
W	184	128.668				ug/L
Pd	106	-100.694				ug/L
Kr	83	32.000				ug/L
Na	23	63740225.603	117921.078	9157.40	7.8	ug/L
Mg	24	36059357.829	109301.723	8159.21	7.5	ug/L

K	39	48660347.271	113238.204	2154.99	1.9	ug/L
Ca	44	1630602.553	107824.725	2196.22	2.0	ug/L
Ti	47	156161.230				ug/L
Sc-1	45	106601.836				ug/L

QC Calculated Values

Analyte	Mass	Duplicate Rel. % Difference	Int Std % Recovery
Be	9		
B	11		
Al	27		
> Sc	45		96.544
V	51		
Cr	52		
Cr	53		
Mn	55		
Co	59		
Ni	60		
Cu	63		
Cu	65		
Zn	66		
Zn	68		
> Ge	72		75.535
As	75		
Se	77		
Se	82		
Sr	88		
Mo	98		
> Rh	103		73.908
Ag	107		
Cd	111		
Cd	114		
> In	115		85.952
Sn	120		
Sb	121		
Ba	137		
Ba	138		
> Tb	159		86.337
Tl	205		
Pb	208		
Hg	200		
Hg	201		
> Bi	209		69.348
U	238		
C	13		
W	184		
Pd	106		
Kr	83		
Na	23		
Mg	24		
K	39		
Ca	44		

	Ti	47
	Sc-1	45

Calibration File Table

Analyte	Mass	Slope	Intercept	Corr Coeff	Curve Type
Be	9.012	0.000159	0.000	0.999865	Linear Thru Zero
B	11.009	0.000307	0.000	0.999949	Linear Thru Zero
Al	26.982	0.004724	0.000	0.999904	Linear Thru Zero
Sc	44.956	0.000000	0.000	0.000000	Linear Thru Zero
V	50.944	0.007928	0.000	0.999917	Linear Thru Zero
Cr	51.941	0.007187	0.000	0.999995	Linear Thru Zero
Cr	52.941	0.000837	0.000	0.994626	Linear Thru Zero
Mn	54.938	0.012931	0.000	0.999997	Linear Thru Zero
Co	58.933	0.008148	0.000	0.999998	Linear Thru Zero
Ni	59.933	0.001662	0.000	0.999984	Linear Thru Zero
Cu	62.930	0.003721	0.000	0.999986	Linear Thru Zero
Cu	64.928	0.001735	0.000	0.999968	Linear Thru Zero
Zn	65.926	0.001079	0.000	0.999977	Linear Thru Zero
Zn	67.925	0.000766	0.000	0.999933	Linear Thru Zero
Ge	71.922	0.000000	0.000	0.000000	Linear Thru Zero
As	74.922	0.001125	0.000	0.999989	Linear Thru Zero
Se	76.920	0.000108	0.000	0.999865	Linear Thru Zero
Se	81.917	0.000159	0.000	0.999986	Linear Thru Zero
Sr	87.906	0.022332	0.000	0.999965	Linear Thru Zero
Mo	97.906	0.004476	0.000	0.999942	Linear Thru Zero
Rh	102.905	0.000000	0.000	0.000000	Linear Thru Zero
Ag	106.905	0.009319	0.000	0.999987	Linear Thru Zero
Cd	110.904	0.001494	0.000	0.999992	Linear Thru Zero
Cd	113.904	0.003557	0.000	0.999994	Linear Thru Zero
In	114.904	0.000000	0.000	0.000000	Linear Thru Zero
Sn	119.902	0.006694	0.000	0.999986	Linear Thru Zero
Sb	120.904	0.004587	0.000	0.999973	Linear Thru Zero
Ba	136.905	0.001810	0.000	0.999993	Linear Thru Zero
Ba	137.905	0.011379	0.000	0.999996	Linear Thru Zero
Tb	158.925	0.000000	0.000	0.000000	Linear Thru Zero
Tl	204.975	0.012760	0.000	0.999974	Linear Thru Zero
Pb	207.977	0.009403	0.000	0.999982	Linear Thru Zero
Hg	199.968	0.000853	0.000	0.999942	Linear Thru Zero
Hg	200.970	0.000481	0.000	0.999937	Linear Thru Zero
Bi	208.980	0.000000	0.000	0.000000	Linear Thru Zero
U	238.050	0.036370	0.000	0.999913	Linear Thru Zero
C	13.003	0.000000	0.000	0.000000	Linear Thru Zero
W	183.951	0.000000	0.000	0.000000	Linear Thru Zero
Pd	105.903	0.000000	0.000	0.000000	Linear Thru Zero
Kr	82.914	0.000000	0.000	0.000000	Linear Thru Zero
Na	22.990	540.491248	0.000	0.999849	Linear Thru Zero
Mg	23.985	329.904997	0.000	0.999995	Linear Thru Zero
K	38.964	429.456751	0.000	0.999903	Linear Thru Zero
Ca	43.956	15.121107	0.000	0.999857	Linear Thru Zero
Ti	46.952	0.000000	0.000	0.000000	Linear Thru Zero
Sc-1	44.956	0.000000	0.000	0.000000	Linear Thru Zero

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2277

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Metals - EPA 3005A

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720405-07 B	m6020wb Dis Copper	7/27/2017 6:00AM	ARD	10	10					
1720405-07 B	m6020wb Dis Arsenic	7/27/2017 6:00AM	ARD	10	10					
1720405-08 B	m6020wb Dis Arsenic	7/27/2017 6:00AM	ARD	10	10					
1720405-08 B	m6020wb Dis Copper	7/27/2017 6:00AM	ARD	10	10					
1720405-09 B	m6020wb Dis Arsenic	7/27/2017 6:00AM	ARD	10	10					
1720405-09 B	m6020wb Dis Copper	7/27/2017 6:00AM	ARD	10	10					
1720405-19 D	m6020wb Dis Copper	7/27/2017 6:00AM	ARD	10	10					
1720405-19 D	m6020wb Dis Arsenic	7/27/2017 6:00AM	ARD	10	10					
1720405-20 D	m6020wb Dis Copper	7/27/2017 6:00AM	ARD	10	10					
1720405-20 D	m6020wb Dis Arsenic	7/27/2017 6:00AM	ARD	10	10					
1720405-21 D	m6020wb Dis Arsenic	7/27/2017 6:00AM	ARD	10	10					
1720405-21 D	m6020wb Dis Copper	7/27/2017 6:00AM	ARD	10	10					
B[G2277-BLK1	QC	7/27/2017 6:00AM	ARD	10	10					
B[G2277-BS1	QC	7/27/2017 6:00AM	ARD	10	10	7G19011		200		
B[G2277-DUP1	QC	7/27/2017 6:00AM	ARD	10	10		1720405-19			
B[G2277-MS1	QC	7/27/2017 6:00AM	ARD	9.8	10	7G19011	1720405-19	200		
B[G2277-MSD1	QC	7/27/2017 6:00AM	ARD	9.8	10	7G19011	1720405-19	200		

Spike Mixes	Description	Solvent	Prepared	Expires
7G19011	ICPMS Spike with B, Al, Hg, U	5% HNO3 & 5% HCL	7/19/2017 5 by Angelica Demac	10/19/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713355

Instrument: PE-EL2

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713355-ICV1	QC		1		7G25024		
1713355-ICB1	QC		2		6K21031		
1713355-CRL2	QC		3		7G21009		
1713355-CCV1	QC		4		7G25037		
1713355-CCB1	QC		5		6K21031		
1713355-CCV2	QC		6		7G25037		
1713355-CCB2	QC		7		6K21031		
1713355-IFA1	QC		8		7G14003		
1713355-IFB1	QC		9		7G14004		
1713355-CCV3	QC		10		7G25037		
1713355-CCB3	QC		11		6K21031		
B[G2277-BS1	QC		12				
B[G2277-BLK1	QC		13				
1720405-19	m6020wb Dis Arsenic	D	14				
1720405-19	m6020wb Dis Copper	D	15				
B[G2277-DUP1	QC		16				
B[G2277-MS1	QC		17				
B[G2277-MSD1	QC		18				
1720405-20	m6020wb Dis Arsenic	D	19				
1720405-20	m6020wb Dis Copper	D	20				
1720405-21	m6020wb Dis Arsenic	D	21				
1720405-21	m6020wb Dis Copper	D	22				
1713355-CCV4	QC		23		7G25037		
1713355-CCB4	QC		24		6K21031		
1720405-07	m6020wb Dis Arsenic	B	25				
1720405-07	m6020wb Dis Copper	B	26				
1720405-08	m6020wb Dis Arsenic	B	27				
1720405-08	m6020wb Dis Copper	B	28				
1720405-09	m6020wb Dis Arsenic	B	29				
1720405-09	m6020wb Dis Copper	B	30				
1713355-CCV5	QC		31		7G25037		
1713355-CCB5	QC		32		6K21031		



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20405
Class: VOA
Method: EPA-8260B



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Client Sample Id:

Lab Sample Id:

27EW-02_170725

1720405-01

27EW-03_170725

1720405-02

27EW-04_170725

1720405-03

27EW-08_170725

1720405-04

27EW-14_170725

1720405-05

27EW-18_170725

1720405-06

DUP07_170725

1720405-10

27EW-13_170725

1720405-13

27EW-16_170725

1720405-14

27EW-17_170725

1720405-15

27EW-17_170725

1720405-15RE1

27MW01_170725

1720405-16

27MW14_170725

1720405-17

DUP08_170725

1720405-18

EB24_170725

1720405-19

EB25_170725

1720405-20

EB26_170725

1720405-21

TB15_170725

1720405-22

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: Sara Guron

Date: 08-25-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: MS-V5

Analyte	DL	LOD	LOQ	Units
Benzene	0.083	0.16	0.50	ug/L
Bromobenzene	0.13	0.16	0.50	ug/L
Bromochloromethane	0.24	0.30	1.0	ug/L
Bromodichloromethane	0.14	0.30	0.50	ug/L
Bromoform	0.27	0.30	0.60	ug/L
Bromomethane	0.25	0.25	0.60	ug/L
n-Butylbenzene	0.11	0.16	0.50	ug/L
sec-Butylbenzene	0.15	0.16	0.50	ug/L
tert-Butylbenzene	0.13	0.16	0.50	ug/L
Carbon tetrachloride	0.18	0.20	0.50	ug/L
Chlorobenzene	0.093	0.16	0.50	ug/L
Chloroethane	0.14	0.16	0.50	ug/L
Chloroform	0.12	0.16	0.50	ug/L
Chloromethane	0.14	0.16	0.50	ug/L
2-Chlorotoluene	0.20	0.20	0.50	ug/L
4-Chlorotoluene	0.15	0.16	0.50	ug/L
Dibromochloromethane	0.13	0.16	0.50	ug/L
1,2-Dibromo-3-chloropropane	0.44	0.50	1.0	ug/L
1,2-Dibromoethane	0.16	0.16	0.50	ug/L
Dibromomethane	0.24	0.30	1.0	ug/L
1,2-Dichlorobenzene	0.072	0.16	0.50	ug/L
1,3-Dichlorobenzene	0.15	0.16	0.50	ug/L
1,4-Dichlorobenzene	0.062	0.16	0.50	ug/L
Dichlorodifluoromethane	0.099	0.16	0.50	ug/L
1,1-Dichloroethane	0.11	0.16	0.50	ug/L
1,2-Dichloroethane	0.17	0.20	0.50	ug/L
1,1-Dichloroethene	0.18	0.20	0.50	ug/L
cis-1,2-Dichloroethene	0.085	0.16	0.50	ug/L
trans-1,2-Dichloroethene	0.15	0.16	0.50	ug/L
1,2-Dichloropropane	0.13	0.16	0.50	ug/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: MS-V5

Analyte	DL	LOD	LOQ	Units
1,3-Dichloropropane	0.086	0.16	0.50	ug/L
2,2-Dichloropropane	0.13	0.16	0.50	ug/L
1,1-Dichloropropene	0.085	0.16	0.50	ug/L
cis-1,3-Dichloropropene	0.14	0.16	0.50	ug/L
trans-1,3-Dichloropropene	0.079	0.16	0.50	ug/L
Ethylbenzene	0.098	0.16	0.50	ug/L
Hexachlorobutadiene	0.17	0.20	0.50	ug/L
Isopropylbenzene	0.14	0.16	0.50	ug/L
p-Isopropyltoluene	0.12	0.16	0.50	ug/L
Methylene chloride	0.48	0.50	1.0	ug/L
Methyl t-butyl ether	0.11	0.16	0.50	ug/L
Naphthalene	0.36	0.40	0.50	ug/L
n-Propylbenzene	0.11	0.16	0.50	ug/L
Styrene	0.068	0.16	0.50	ug/L
1,1,1,2-Tetrachloroethane	0.18	0.20	0.50	ug/L
1,1,2,2-Tetrachloroethane	0.17	0.20	0.50	ug/L
Tetrachloroethene	0.13	0.16	0.50	ug/L
Toluene	0.093	0.16	0.50	ug/L
1,2,3-Trichlorobenzene	0.16	0.16	0.50	ug/L
1,2,4-Trichlorobenzene	0.19	0.20	0.50	ug/L
1,1,1-Trichloroethane	0.11	0.16	0.50	ug/L
1,1,2-Trichloroethane	0.16	0.16	0.50	ug/L
Trichloroethene	0.085	0.16	0.50	ug/L
Trichlorofluoromethane	0.13	0.16	0.50	ug/L
1,2,3-Trichloropropane	0.24	0.33	0.50	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	0.15	0.16	0.50	ug/L
1,2,4-Trimethylbenzene	0.12	0.16	0.50	ug/L
1,3,5-Trimethylbenzene	0.12	0.16	0.50	ug/L
Vinyl chloride	0.12	0.16	0.50	ug/L
Total Xylenes	0.36	0.46	1.0	ug/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: MS-V5

Analyte	DL	LOD	LOQ	Units
Acetone	4.6	5.0	10	ug/L
Acetonitrile	5.5	6.0	10	ug/L
Allyl chloride	0.80	1.0	5.0	ug/L
t-Amyl Methyl ether	0.25	0.30	0.50	ug/L
Benzyl chloride	0.60	0.60	1.0	ug/L
t-Butyl alcohol	9.4	10	12	ug/L
Carbon disulfide	0.38	0.40	1.0	ug/L
Chloroprene	0.37	1.0	5.0	ug/L
Diisopropyl ether	0.23	0.30	0.50	ug/L
Ethyl t-butyl ether	0.18	0.20	0.50	ug/L
2-Hexanone	3.4	4.0	10	ug/L
Methyl ethyl ketone	2.5	3.0	10	ug/L
Methyl isobutyl ketone	2.1	3.0	10	ug/L
Vinyl acetate	1.8	6.0	20	ug/L
p- & m-Xylenes	0.28	0.30	0.50	ug/L
o-Xylene	0.082	0.16	0.50	ug/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-02_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-01 File ID: 29JUL19.D
Sampled: 07/25/17 09:40 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 21:26
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.28	0.15	0.16	0.50	J
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.24	0.093	0.16	0.50	J
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.44	0.072	0.16	0.50	J
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	4.5	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.92	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-02_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-01 File ID: 29JUL19.D
Sampled: 07/25/17 09:40 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 21:26
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

27EW-02_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-01 File ID: 29JUL19.D
Sampled: 07/25/17 09:40 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 21:26
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.540	105	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8800	98.8	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.7500	97.5	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	172662	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	68677	9.62	62675	9.62	
1,4-Difluorobenzene (IS)	252151	7.38	236027	7.38	

* Values outside of QC limits



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San Diego, CA 92123

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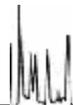
ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-03_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-02 File ID: 29JUL16.D
Sampled: 07/25/17 10:35 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 20:17
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	8.7	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.70	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-03_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-02 File ID: 29JUL16.D
Sampled: 07/25/17 10:35 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 20:17
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various organic compounds and their analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

27EW-03_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-02 File ID: 29JUL16.D
Sampled: 07/25/17 10:35 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 20:17
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.740	107	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.4600	94.6	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.060	101	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	178590	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	71489	9.61	62675	9.62	
1,4-Difluorobenzene (IS)	273726	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-04_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-03 File ID: 29JUL17.D
Sampled: 07/25/17 11:10 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 20:40
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: B1G2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various organic compounds like Benzene, Bromobenzene, etc., with their respective analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-04_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-03 File ID: 29JUL17.D
Sampled: 07/25/17 11:10 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 20:40
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	1.4	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	8.5	0.12	0.16	0.50	
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure-
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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

27EW-04_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-03 File ID: 29JUL17.D
 Sampled: 07/25/17 11:10 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 20:40
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	9.9500	99.5	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8800	98.8	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.2500	92.5	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	177436	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	73062	9.62	62675	9.62	
1,4-Difluorobenzene (IS)	258068	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-08_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-04 File ID: 29JUL18.D
Sampled: 07/25/17 11:15 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 21:03
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	3.5	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.28	0.15	0.16	0.50	J
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-08_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-04 File ID: 29JUL18.D
Sampled: 07/25/17 11:15 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 21:03
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

27EW-08_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-04 File ID: 29JUL18.D
Sampled: 07/25/17 11:15 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 21:03
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.990	110	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7400	97.4	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.060	101	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	172883	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	65879	9.61	62675	9.62	
1,4-Difluorobenzene (IS)	253223	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-14_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-05 File ID: 29JUL20.D
Sampled: 07/25/17 11:40 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 21:49
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.37	0.083	0.16	0.50	J
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	2.4	0.093	0.16	0.50	
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	7.4	0.072	0.16	0.50	
541-73-1	1,3-Dichlorobenzene	1	0.34	0.15	0.16	0.50	J
106-46-7	1,4-Dichlorobenzene	1	1.3	0.062	0.16	0.50	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.28	0.11	0.16	0.50	J
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	13	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.87	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-14_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-05 File ID: 29JUL20.D
Sampled: 07/25/17 11:40 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 21:49
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-14_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-05 File ID: 29JUL20.D
 Sampled: 07/25/17 11:40 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 21:49
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.750	108	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6100	96.1	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.120	101	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	169069	6.58	158448	6.57	
Chlorobenzene-d5 (IS)	67984	9.62	62675	9.62	
1,4-Difluorobenzene (IS)	253732	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

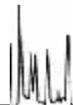
ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-18_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-06 File ID: 29JUL21.D
Sampled: 07/25/17 09:35 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 22:12
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	4.8	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	J
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-18_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-06 File ID: 29JUL21.D
Sampled: 07/25/17 09:35 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 22:12
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

27EW-18_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-06 File ID: 29JUL21.D
Sampled: 07/25/17 09:35 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 22:12
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.370	104	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.4700	94.7	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.150	102	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	175384	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	65650	9.61	62675	9.62	
1,4-Difluorobenzene (IS)	259277	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

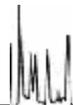
ORGANIC ANALYSIS DATA SHEET

EPA-8260B

DUP07_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-10 File ID: 29JUL22.D
Sampled: 07/25/17 11:15 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 22:35
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.20	0.083	0.16	0.50	J
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	1.0	0.093	0.16	0.50	
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	5.5	0.072	0.16	0.50	
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.64	0.062	0.16	0.50	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.88	0.11	0.16	0.50	
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	11	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	3.1	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

DUP07_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-10 File ID: 29JUL22.D
Sampled: 07/25/17 11:15 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 22:35
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

DUP07_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-10 File ID: 29JUL22.D
 Sampled: 07/25/17 11:15 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 22:35
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.040	100	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6200	96.2	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.5900	95.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	180098	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	68034	9.62	62675	9.62	
1,4-Difluorobenzene (IS)	267208	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-13_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-13 File ID: 29JUL23.D
Sampled: 07/25/17 12:50 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 22:58
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	3.3	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.19	0.15	0.16	0.50	J
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-13_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-13 File ID: 29JUL23.D
Sampled: 07/25/17 12:50 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 22:58
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

27EW-13_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-13 File ID: 29JUL23.D
Sampled: 07/25/17 12:50 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 22:58
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.790	108	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7800	97.8	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9400	99.4	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	173202	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	67952	9.62	62675	9.62	
1,4-Difluorobenzene (IS)	252230	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-16_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-14 File ID: 29JUL24.D
Sampled: 07/25/17 11:50 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 23:21
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	8.1	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.39	0.15	0.16	0.50	J
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-16_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-14 File ID: 29JUL24.D
Sampled: 07/25/17 11:50 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 23:21
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.37	0.085	0.16	0.50	J
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.20	0.12	0.16	0.50	J
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-16_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-14 File ID: 29JUL24.D
 Sampled: 07/25/17 11:50 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 23:21
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.580	106	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.4700	94.7	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6500	96.5	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	172209	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	67555	9.62	62675	9.62	
1,4-Difluorobenzene (IS)	260506	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-17_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-15 File ID: 29JUL10.D
Sampled: 07/25/17 12:35 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 17:59
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.29	0.083	0.16	0.50	J
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.37	0.11	0.16	0.50	J
135-98-8	sec-Butylbenzene	1	6.0	0.15	0.16	0.50	
98-06-6	tert-Butylbenzene	1	1.0	0.13	0.16	0.50	
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
541-73-1	1,3-Dichlorobenzene	1	20	0.15	0.16	0.50	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	12	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	1.3	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.48	0.098	0.16	0.50	J
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

27EW-17_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-15 File ID: 29JUL10.D
Sampled: 07/25/17 12:35 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 17:59
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
98-82-8	Isopropylbenzene	1	3.1	0.14	0.16	0.50	
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	1.9	0.11	0.16	0.50	
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.51	0.093	0.16	0.50	
87-61-6	1,2,3-Trichlorobenzene	1	3.3	0.16	0.16	0.50	
120-82-1	1,2,4-Trichlorobenzene	1	13	0.19	0.20	0.50	
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	4.5	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.21	0.12	0.16	0.50	J
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	3.9	0.12	0.16	0.50	
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	1	0.33	0.082	0.16	0.50	J

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
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AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-17_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-15 File ID: 29JUL10.D
 Sampled: 07/25/17 12:35 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 17:59
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.200	102	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8600	98.6	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.8900	98.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	179580	6.57	162953	6.57	
Chlorobenzene-d5 (IS)	69430	9.61	64183	9.62	
1,4-Difluorobenzene (IS)	259780	7.38	237313	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-17_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-15RE1 File ID: 30JUL27.D
 Sampled: 07/25/17 12:35 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 17:43
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713392 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
108-90-7	Chlorobenzene	10	250	0.93	1.6	5.0	D
95-50-1	1,2-Dichlorobenzene	10	240	0.72	1.6	5.0	D
106-46-7	1,4-Dichlorobenzene	10	110	0.62	1.6	5.0	D

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.410	104	81 - 118	
Toluene-d8 (Surrogate)	10.000	10.020	100	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.7600	97.6	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	161482	6.57	185319	6.58	
Chlorobenzene-d5 (IS)	65937	9.61	69677	9.61	
1,4-Difluorobenzene (IS)	244352	7.38	262555	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27MW01_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-16 File ID: 29JUL02.D
Sampled: 07/25/17 12:05 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 14:55
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various organic compounds like Benzene, Bromobenzene, etc., with their respective analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27MW01_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-16 File ID: 29JUL02.D
Sampled: 07/25/17 12:05 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 14:55
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their analysis results.



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
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ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27MW01_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-16 File ID: 29JUL02.D
 Sampled: 07/25/17 12:05 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 14:55
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.450	104	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.4900	94.9	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6700	96.7	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	171437	6.58	162953	6.57	
Chlorobenzene-d5 (IS)	68812	9.61	64183	9.62	
1,4-Difluorobenzene (IS)	258263	7.38	237313	7.38	

* Values outside of QC limits



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San Diego, CA 92123

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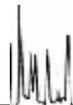
ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27MW14_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-17 File ID: 29JUL25.D
Sampled: 07/25/17 12:55 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 23:44
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various organic compounds like Benzene, Bromobenzene, etc., with their respective analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27MW14_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-17 File ID: 29JUL25.D
Sampled: 07/25/17 12:55 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 23:44
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

27MW14_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-17 File ID: 29JUL25.D
 Sampled: 07/25/17 12:55 Prepared: 07/29/17 07:00 Analyzed: 07/29/17 23:44
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.130	101	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6100	96.1	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.3800	93.8	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	172400	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	68091	9.61	62675	9.62	
1,4-Difluorobenzene (IS)	254000	7.38	236027	7.38	

* Values outside of QC limits



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San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

DUP08_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-18 File ID: 29JUL26.D
Sampled: 07/25/17 12:00 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 00:07
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.28	0.072	0.16	0.50	J
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	7.5	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.45	0.15	0.16	0.50	J
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

DUP08_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-18 File ID: 29JUL26.D
Sampled: 07/25/17 12:00 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 00:07
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

DUP08_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-18 File ID: 29JUL26.D
 Sampled: 07/25/17 12:00 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 00:07
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.160	102	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.5500	95.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.5800	95.8	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	174139	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	68275	9.61	62675	9.62	
1,4-Difluorobenzene (IS)	257556	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

EB24_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-19 File ID: 29JUL27.D
Sampled: 07/25/17 14:05 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 00:30
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: B1G2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various organic compounds like Benzene, Bromobenzene, etc., with their respective analysis results.



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

EB24_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-19 File ID: 29JUL27.D
Sampled: 07/25/17 14:05 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 00:30
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various compounds like 1,1-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, etc.



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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

EB24_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-19 File ID: 29JUL27.D
 Sampled: 07/25/17 14:05 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 00:30
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.550	106	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8800	98.8	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.2700	92.7	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	170269	6.58	158448	6.57	
Chlorobenzene-d5 (IS)	69241	9.61	62675	9.62	
1,4-Difluorobenzene (IS)	252756	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

EB25_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-20 File ID: 29JUL28.D
Sampled: 07/25/17 14:10 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 00:53
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

EB25_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-20 File ID: 29JUL28.D
Sampled: 07/25/17 14:10 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 00:53
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their detection results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

EB25_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-20 File ID: 29JUL28.D
Sampled: 07/25/17 14:10 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 00:53
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.480	105	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.9400	99.4	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.5700	95.7	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	173969	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	67498	9.62	62675	9.62	
1,4-Difluorobenzene (IS)	254930	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

EB26_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-21 File ID: 29JUL29.D
Sampled: 07/25/17 14:15 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 01:16
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

EB26_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-21 File ID: 29JUL29.D
Sampled: 07/25/17 14:15 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 01:16
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various chemical compounds and their analysis results.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

EB26_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-21 File ID: 29JUL29.D
 Sampled: 07/25/17 14:15 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 01:16
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.410	104	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8600	98.6	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.2100	92.1	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	153800	6.58	158448	6.57	
Chlorobenzene-d5 (IS)	61598	9.61	62675	9.62	
1,4-Difluorobenzene (IS)	220535	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

TB15_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-22 File ID: 29JUL30.D
Sampled: 07/25/17 14:00 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 01:39
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various organic compounds like Benzene, Bromobenzene, etc., with their respective dilution and concentration values.



AMEC Environmental & Infrastructure-
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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

TB15_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720405-22 File ID: 29JUL30.D
Sampled: 07/25/17 14:00 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 01:39
Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

Table with 8 columns: CAS NO., COMPOUND, DILUTION, CONC. (ug/L), DL, LOD, LOQ, Q. Rows list various organic compounds such as 1,1-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, etc.



AMEC Environmental & Infrastructure-
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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

TB15_170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
 Matrix: Water Laboratory ID: 1720405-22 File ID: 29JUL30.D
 Sampled: 07/25/17 14:00 Prepared: 07/29/17 07:00 Analyzed: 07/30/17 01:39
 Solids: Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Batch: BIG2492 Sequence: 1713390 Calibration: 1707017 Instrument: MS-V5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.460	105	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.9100	99.1	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9300	99.3	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	173986	6.57	158448	6.57	
Chlorobenzene-d5 (IS)	66088	9.61	62675	9.62	
1,4-Difluorobenzene (IS)	252892	7.38	236027	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Batch: B[G2492 Batch Matrix: Water Preparation: EPA 5030 Water MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
27EW-02_170725	1720405-01	29JUL19.D	07/29/17 07:00	Full SAP LIST
27EW-03_170725	1720405-02	29JUL16.D	07/29/17 07:00	Full SAP LIST
27EW-04_170725	1720405-03	29JUL17.D	07/29/17 07:00	Full SAP LIST
27EW-08_170725	1720405-04	29JUL18.D	07/29/17 07:00	Full SAP LIST
27EW-14_170725	1720405-05	29JUL20.D	07/29/17 07:00	Full SAP LIST
27EW-18_170725	1720405-06	29JUL21.D	07/29/17 07:00	Full SAP LIST
DUP07_170725	1720405-10	29JUL22.D	07/29/17 07:00	Full SAP LIST
27EW-13_170725	1720405-13	29JUL23.D	07/29/17 07:00	Full SAP LIST
27EW-16_170725	1720405-14	29JUL24.D	07/29/17 07:00	Full SAP LIST
27EW-17_170725	1720405-15	29JUL10.D	07/29/17 07:00	Full SAP LIST
27EW-17_170725	1720405-15RE1	30JUL27.D	07/29/17 07:00	Full SAP LIST
27MW01_170725	1720405-16	29JUL02.D	07/29/17 07:00	Full SAP LIST
27MW14_170725	1720405-17	29JUL25.D	07/29/17 07:00	Full SAP LIST
DUP08_170725	1720405-18	29JUL26.D	07/29/17 07:00	Full SAP LIST
EB24_170725	1720405-19	29JUL27.D	07/29/17 07:00	Full SAP LIST
EB25_170725	1720405-20	29JUL28.D	07/29/17 07:00	Full SAP LIST
EB26_170725	1720405-21	29JUL29.D	07/29/17 07:00	Full SAP LIST
TB15_170725	1720405-22	29JUL30.D	07/29/17 07:00	Full SAP LIST
Blank	B[G2492-BLK1	29JUL01.D	07/29/17 07:00	
LCS	B[G2492-BS1	29JUL03.D	07/29/17 07:00	
27MW01_170725	B[G2492-MS1	29JUL04.D	07/29/17 07:00	
27MW01_170725	B[G2492-MSD1	29JUL05.D	07/29/17 07:00	



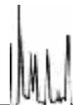
AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: BIG2492-BLK1 File ID: 29JUL01.D
Prepared: 07/29/17 07:00 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Analyzed: 07/29/17 14:32 Instrument: MS-V5
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	0.16	0.099	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: BIG2492-BLK1 File ID: 29JUL01.D
Prepared: 07/29/17 07:00 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Analyzed: 07/29/17 14:32 Instrument: MS-V5
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
75-34-3	1,1-Dichloroethane	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	0.16	0.13	0.16	0.50	U
563-58-6	1,1-Dichloropropene	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.20	0.19	0.20	0.50	U



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: BIG2492-BLK1 File ID: 29JUL01.D
Prepared: 07/29/17 07:00 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Analyzed: 07/29/17 14:32 Instrument: MS-V5
Batch: BIG2492 Sequence: 1713390 Calibration: 1707017

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
71-55-6	1,1,1-Trichloroethane	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	10	9.4	10	12	U
75-15-0	Carbon disulfide	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.190	102	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8500	98.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.5900	95.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	178938	6.58	162953	6.57	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>		
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>		
Matrix:	<u>Water</u>	Laboratory ID:	<u>BIG2492-BLK1</u>	File ID:	<u>29JUL01.D</u>
Prepared:	<u>07/29/17 07:00</u>	Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Analyzed:	<u>07/29/17 14:32</u>	Instrument:	<u>MS-V5</u>		
Batch:	<u>BIG2492</u>	Sequence:	<u>1713390</u>	Calibration:	<u>1707017</u>

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Chlorobenzene-d5 (IS)	69768	9.61	64183	9.62	
1,4-Difluorobenzene (IS)	261493	7.38	237313	7.38	



AMEC Environmental & Infrastructure- 9210 Sky Park Court #200 San Diego, CA 92123	Reported: 8/25/2017 9:39:35AM Project: Alameda Project Number: 5023146096 Project Manager: Kevin Olness
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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY
EPA-8260B

27MW01 170725

Laboratory: <u>BC Laboratories</u>	SDG: <u>17-20405</u>
Client: <u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project: <u>Alameda</u>
Matrix: <u>Water</u>	
Batch: <u>BIG2492</u>	Laboratory ID: <u>BIG2492-MS1</u>
Preparation: <u>EPA 5030 Water MS</u>	Initial/Final: <u>25 ml / 25 ml</u>
Source Sample Number: <u>1720405-16</u>	

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Benzene	25.000	0.11000	23.280	92.7	79 - 120
Bromobenzene	25.000	ND	26.050	104	80 - 120
Bromochloromethane	25.000	ND	22.720	90.9	78 - 123
Bromodichloromethane	25.000	ND	25.100	100	79 - 125
Bromoform	25.000	ND	26.410	106	66 - 130
Bromomethane	25.000	ND	22.660	90.6	53 - 141
n-Butylbenzene	25.000	ND	24.710	98.8	75 - 128
sec-Butylbenzene	25.000	ND	26.260	105	77 - 126
tert-Butylbenzene	25.000	ND	25.350	101	78 - 124
Carbon tetrachloride	25.000	ND	27.140	109	72 - 136
Chlorobenzene	25.000	0.71000	23.830	92.5	82 - 118
Chloroethane	25.000	ND	22.720	90.9	60 - 138
Chloroform	25.000	ND	23.940	95.8	79 - 124
Chloromethane	25.000	ND	20.220	80.9	50 - 139
2-Chlorotoluene	25.000	ND	23.710	94.8	79 - 122
4-Chlorotoluene	25.000	ND	23.560	94.2	78 - 122
Dibromochloromethane	25.000	ND	26.730	107	74 - 126
1,2-Dibromo-3-chloropropane	25.000	ND	23.100	92.4	62 - 128
1,2-Dibromoethane	25.000	ND	24.310	97.2	77 - 121
Dibromomethane	25.000	ND	24.620	98.5	79 - 123
1,2-Dichlorobenzene	25.000	1.3200	24.540	92.9	80 - 119
1,3-Dichlorobenzene	25.000	ND	24.710	98.8	80 - 119
1,4-Dichlorobenzene	25.000	0.20000	24.500	97.2	79 - 118
Dichlorodifluoromethane	25.000	ND	27.920	112	32 - 152
1,1-Dichloroethane	25.000	0.12000	23.890	95.1	77 - 125



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW01 170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: BIG2492 Laboratory ID: BIG2492-MS1
Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,2-Dichloroethane	25.000	ND	23.520	94.1	73 - 128
1,1-Dichloroethene	25.000	ND	26.530	106	71 - 131
cis-1,2-Dichloroethene	25.000	6.1300	29.710	94.3	78 - 123
trans-1,2-Dichloroethene	25.000	0.76000	25.540	99.1	75 - 124
1,2-Dichloropropane	25.000	ND	22.830	91.3	78 - 122
1,3-Dichloropropane	25.000	ND	22.590	90.4	80 - 119
2,2-Dichloropropane	25.000	ND	26.500	106	60 - 139
1,1-Dichloropropene	25.000	ND	23.260	93.0	79 - 125
cis-1,3-Dichloropropene	25.000	ND	24.510	98.0	75 - 124
trans-1,3-Dichloropropene	25.000	ND	25.850	103	73 - 127
Ethylbenzene	25.000	ND	25.420	102	79 - 121
Hexachlorobutadiene	25.000	ND	26.660	107	66 - 134
Isopropylbenzene	25.000	ND	25.950	104	72 - 131
p-Isopropyltoluene	25.000	ND	26.570	106	77 - 127
Methylene chloride	25.000	ND	22.520	90.1	74 - 124
Methyl t-butyl ether	25.000	ND	23.170	92.7	71 - 124
Naphthalene	25.000	ND	23.890	95.6	61 - 128
n-Propylbenzene	25.000	ND	23.760	95.0	76 - 126
Styrene	25.000	ND	25.710	103	78 - 123
1,1,1,2-Tetrachloroethane	25.000	ND	27.560	110	78 - 124
1,1,2,2-Tetrachloroethane	25.000	ND	23.570	94.3	71 - 121
Tetrachloroethene	25.000	0.15000	27.420	109	74 - 129
Toluene	25.000	ND	24.830	99.3	80 - 121
1,2,3-Trichlorobenzene	25.000	ND	26.790	107	69 - 129
1,2,4-Trichlorobenzene	25.000	ND	26.540	106	69 - 130



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW01 170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water
Batch: BIG2492 Laboratory ID: BIG2492-MS1
Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,1,1-Trichloroethane	25.000	ND	26.130	105	74 - 131
1,1,2-Trichloroethane	25.000	ND	23.110	92.4	80 - 119
Trichloroethene	25.000	0.45000	26.470	104	79 - 123
Trichlorofluoromethane	25.000	ND	26.440	106	65 - 141
1,2,3-Trichloropropane	25.000	ND	24.820	99.3	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	ND	26.070	104	70 - 136
1,2,4-Trimethylbenzene	25.000	ND	24.730	98.9	76 - 124
1,3,5-Trimethylbenzene	25.000	ND	26.100	104	75 - 124
Vinyl chloride	25.000	1.0600	24.110	92.2	58 - 137
Total Xylenes	75.000	ND	75.230	100	79 - 121
Acetone	320.00	ND	296.23	92.6	39 - 160
Acetonitrile	160.00	ND	152.10	95.1	50 - 142
Allyl chloride	32.000	ND	30.780	96.2	68 - 130
t-Amyl Methyl ether	16.000	ND	14.380	89.9	68 - 128
Benzyl chloride	32.000	ND	37.000	116	42 - 138
t-Butyl alcohol	800.00	ND	804.64	101	68 - 129
Carbon disulfide	32.000	ND	30.350	94.8	64 - 133
Chloroprene	32.000	ND	31.640	98.9	65 - 135
Diisopropyl ether	16.000	ND	15.450	96.6	67 - 128
Ethyl t-butyl ether	16.000	ND	14.780	92.4	70 - 127
2-Hexanone	320.00	ND	316.87	99.0	57 - 139
Methyl ethyl ketone	160.00	ND	150.83	94.3	56 - 143
Methyl isobutyl ketone	160.00	ND	161.75	101	67 - 130
Vinyl acetate	160.00	ND	151.29	94.6	54 - 146



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW01 170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water
Batch: BIG2492 Laboratory ID: BIG2492-MSD1
Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Benzene	25.000	27.780	111	17.6	30	79 - 120
Bromobenzene	25.000	29.790	119	13.4	30	80 - 120
Bromochloromethane	25.000	27.880	112	20.4	30	78 - 123
Bromodichloromethane	25.000	28.770	115	13.6	30	79 - 125
Bromoform	25.000	31.760	127	18.4	30	66 - 130
Bromomethane	25.000	29.170	117	25.1	30	53 - 141
n-Butylbenzene	25.000	29.430	118	17.4	30	75 - 128
sec-Butylbenzene	25.000	30.650	123	15.4	30	77 - 126
tert-Butylbenzene	25.000	29.480	118	15.1	30	78 - 124
Carbon tetrachloride	25.000	31.660	127	15.4	30	72 - 136
Chlorobenzene	25.000	27.560	107	14.5	30	82 - 118
Chloroethane	25.000	27.260	109	18.2	30	60 - 138
Chloroform	25.000	27.990	112	15.6	30	79 - 124
Chloromethane	25.000	25.270	101	22.2	30	50 - 139
2-Chlorotoluene	25.000	27.360	109	14.3	30	79 - 122
4-Chlorotoluene	25.000	27.280	109	14.6	30	78 - 122
Dibromochloromethane	25.000	29.750	119	10.7	30	74 - 126
1,2-Dibromo-3-chloropropane	25.000	28.860	115	22.2	30	62 - 128
1,2-Dibromoethane	25.000	27.710	111	13.1	30	77 - 121
Dibromomethane	25.000	27.950	112	12.7	30	79 - 123
1,2-Dichlorobenzene	25.000	28.560	109	15.1	30	80 - 119
1,3-Dichlorobenzene	25.000	28.610	114	14.6	30	80 - 119
1,4-Dichlorobenzene	25.000	28.730	114	15.9	30	79 - 118
Dichlorodifluoromethane	25.000	32.240	129	14.4	30	32 - 152
1,1-Dichloroethane	25.000	27.870	111	15.4	30	77 - 125
1,2-Dichloroethane	25.000	27.660	111	16.2	30	73 - 128



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW01 170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Batch: BIG2492

Laboratory ID: BIG2492-MSD1

Preparation: EPA 5030 Water MS

Initial/Final: 25 ml / 25 ml

Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	25.000	30.880	124	15.2	30	71 - 131
cis-1,2-Dichloroethene	25.000	35.440	117	17.6	30	78 - 123
trans-1,2-Dichloroethene	25.000	30.850	120	18.8	30	75 - 124
1,2-Dichloropropane	25.000	26.720	107	15.7	30	78 - 122
1,3-Dichloropropane	25.000	26.290	105	15.1	30	80 - 119
2,2-Dichloropropane	25.000	30.720	123	14.8	30	60 - 139
1,1-Dichloropropene	25.000	27.460	110	16.6	30	79 - 125
cis-1,3-Dichloropropene	25.000	28.440	114	14.8	30	75 - 124
trans-1,3-Dichloropropene	25.000	29.340	117	12.6	30	73 - 127
Ethylbenzene	25.000	29.520	118	14.9	30	79 - 121
Hexachlorobutadiene	25.000	31.720	127	17.3	30	66 - 134
Isopropylbenzene	25.000	29.880	120	14.1	30	72 - 131
p-Isopropyltoluene	25.000	30.250	121	13.0	30	77 - 127
Methylene chloride	25.000	27.300	109	19.2	30	74 - 124
Methyl t-butyl ether	25.000	27.430	110	16.8	30	71 - 124
Naphthalene	25.000	28.240	113	16.7	30	61 - 128
n-Propylbenzene	25.000	27.650	111	15.1	30	76 - 126
Styrene	25.000	29.930	120	15.2	30	78 - 123
1,1,1,2-Tetrachloroethane	25.000	32.070	128 *	15.1	30	78 - 124
1,1,2,2-Tetrachloroethane	25.000	26.850	107	13.0	30	71 - 121
Tetrachloroethene	25.000	31.110	124	12.6	30	74 - 129
Toluene	25.000	28.730	115	14.6	30	80 - 121
1,2,3-Trichlorobenzene	25.000	30.880	124	14.2	30	69 - 129
1,2,4-Trichlorobenzene	25.000	32.000	128	18.7	30	69 - 130
1,1,1-Trichloroethane	25.000	30.570	122	15.7	30	74 - 131
1,1,2-Trichloroethane	25.000	26.290	105	12.9	30	80 - 119



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW01 170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water
Batch: BIG2492 Laboratory ID: BIG2492-MSD1
Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-16

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Trichloroethene	25.000	30.250	119	13.3	30	79 - 123
Trichlorofluoromethane	25.000	30.490	122	14.2	30	65 - 141
1,2,3-Trichloropropane	25.000	28.680	115	14.4	30	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	30.750	123	16.5	30	70 - 136
1,2,4-Trimethylbenzene	25.000	28.900	116	15.6	30	76 - 124
1,3,5-Trimethylbenzene	25.000	30.100	120	14.2	30	75 - 124
Vinyl chloride	25.000	30.090	116	22.1	30	58 - 137
Total Xylenes	75.000	87.090	116	14.6	30	79 - 121
Acetone	320.00	349.35	109	16.5	30	39 - 160
Acetonitrile	160.00	187.73	117	21.0	30	50 - 142
Allyl chloride	32.000	38.500	120	22.3	30	68 - 130
t-Amyl Methyl ether	16.000	17.440	109	19.2	30	68 - 128
Benzyl chloride	32.000	44.900	140 *	19.3	30	42 - 138
t-Butyl alcohol	800.00	958.89	120	17.5	30	68 - 129
Carbon disulfide	32.000	38.350	120	23.3	30	64 - 133
Chloroprene	32.000	39.250	123	21.5	30	65 - 135
Diisopropyl ether	16.000	18.850	118	19.8	30	67 - 128
Ethyl t-butyl ether	16.000	17.980	112	19.5	30	70 - 127
2-Hexanone	320.00	361.86	113	13.3	30	57 - 139
Methyl ethyl ketone	160.00	174.80	109	14.7	30	56 - 143
Methyl isobutyl ketone	160.00	184.18	115	13.0	30	67 - 130
Vinyl acetate	160.00	180.99	113	17.9	30	54 - 146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water
Batch: B[G2492] Laboratory ID: B[G2492-BS1]
Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Benzene	25.000	23.450	93.8	79 - 120
Bromobenzene	25.000	26.050	104	80 - 120
Bromochloromethane	25.000	24.680	98.7	78 - 123
Bromodichloromethane	25.000	26.650	107	79 - 125
Bromoform	25.000	26.700	107	66 - 130
Bromomethane	25.000	23.700	94.8	53 - 141
n-Butylbenzene	25.000	25.630	103	75 - 128
sec-Butylbenzene	25.000	27.070	108	77 - 126
tert-Butylbenzene	25.000	26.100	104	78 - 124
Carbon tetrachloride	25.000	27.890	112	72 - 136
Chlorobenzene	25.000	23.060	92.2	82 - 118
Chloroethane	25.000	22.800	91.2	60 - 138
Chloroform	25.000	24.650	98.6	79 - 124
Chloromethane	25.000	22.860	91.4	50 - 139
2-Chlorotoluene	25.000	24.050	96.2	79 - 122
4-Chlorotoluene	25.000	24.180	96.7	78 - 122
Dibromochloromethane	25.000	27.040	108	74 - 126
1,2-Dibromo-3-chloropropane	25.000	22.740	91.0	62 - 128
1,2-Dibromoethane	25.000	25.030	100	77 - 121
Dibromomethane	25.000	25.080	100	79 - 123
1,2-Dichlorobenzene	25.000	23.900	95.6	80 - 119
1,3-Dichlorobenzene	25.000	24.660	98.6	80 - 119
1,4-Dichlorobenzene	25.000	24.430	97.7	79 - 118
Dichlorodifluoromethane	25.000	28.460	114	32 - 152



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**LCS RECOVERY
EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2492 Laboratory ID: B[G2492-BS1
Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1-Dichloroethane	25.000	23.890	95.6	77 - 125
1,2-Dichloroethane	25.000	24.380	97.5	73 - 128
1,1-Dichloroethene	25.000	27.090	108	71 - 131
cis-1,2-Dichloroethene	25.000	24.050	96.2	78 - 123
trans-1,2-Dichloroethene	25.000	25.810	103	75 - 124
1,2-Dichloropropane	25.000	23.610	94.4	78 - 122
1,3-Dichloropropane	25.000	23.420	93.7	80 - 119
2,2-Dichloropropane	25.000	26.970	108	60 - 139
1,1-Dichloropropene	25.000	23.970	95.9	79 - 125
cis-1,3-Dichloropropene	25.000	25.650	103	75 - 124
trans-1,3-Dichloropropene	25.000	27.110	108	73 - 127
Ethylbenzene	25.000	25.810	103	79 - 121
Hexachlorobutadiene	25.000	27.840	111	66 - 134
Isopropylbenzene	25.000	26.440	106	72 - 131
p-Isopropyltoluene	25.000	26.920	108	77 - 127
Methylene chloride	25.000	23.510	94.0	74 - 124
Methyl t-butyl ether	25.000	23.320	93.3	71 - 124
Naphthalene	25.000	23.150	92.6	61 - 128
n-Propylbenzene	25.000	24.470	97.9	76 - 126
Styrene	25.000	26.060	104	78 - 123
1,1,1,2-Tetrachloroethane	25.000	27.420	110	78 - 124
1,1,2,2-Tetrachloroethane	25.000	23.440	93.8	71 - 121
Tetrachloroethene	25.000	30.160	121	74 - 129
Toluene	25.000	26.310	105	80 - 121



AMEC Environmental & Infrastructure- 9210 Sky Park Court #200 San Diego, CA 92123
 Reported: 8/25/2017 9:39:35AM
 Project: Alameda
 Project Number: 5023146096
 Project Manager: Kevin Olness

LCS RECOVERY
 EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water
 Batch: B[G2492 Laboratory ID: B[G2492-BS1
 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,2,3-Trichlorobenzene	25.000	26.400	106	69 - 129
1,2,4-Trichlorobenzene	25.000	27.460	110	69 - 130
1,1,1-Trichloroethane	25.000	26.750	107	74 - 131
1,1,2-Trichloroethane	25.000	23.900	95.6	80 - 119
Trichloroethene	25.000	26.850	107	79 - 123
Trichlorofluoromethane	25.000	26.950	108	65 - 141
1,2,3-Trichloropropane	25.000	24.380	97.5	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	26.620	106	70 - 136
1,2,4-Trimethylbenzene	25.000	25.210	101	76 - 124
1,3,5-Trimethylbenzene	25.000	26.700	107	75 - 124
Vinyl chloride	25.000	25.720	103	58 - 137
Total Xylenes	75.000	75.750	101	79 - 121
Acetone	320.00	276.25	86.3	39 - 160
Acetonitrile	160.00	139.88	87.4	50 - 142
Allyl chloride	32.000	28.880	90.2	68 - 130
t-Amyl Methyl ether	16.000	12.810	80.1	68 - 128
Benzyl chloride	32.000	33.860	106	42 - 138
t-Butyl alcohol	800.00	697.65	87.2	68 - 129
Carbon disulfide	32.000	28.580	89.3	64 - 133
Chloroprene	32.000	30.810	96.3	65 - 135
Diisopropyl ether	16.000	13.370	83.6	67 - 128
Ethyl t-butyl ether	16.000	13.180	82.4	70 - 127
2-Hexanone	320.00	295.87	92.5	57 - 139
Methyl ethyl ketone	160.00	138.21	86.4	56 - 143



AMEC Environmental & Infrastructure-
 9210 Sky Park Court #200
 San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
 Project: Alameda
 Project Number: 5023146096
 Project Manager: Kevin Olness

**LCS RECOVERY
 EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water
 Batch: B[G2492 Laboratory ID: B[G2492-BS1
 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Methyl isobutyl ketone	160.00	145.83	91.1	67 - 130
Vinyl acetate	160.00	134.45	84.0	54 - 146

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits



AMEC Environmental & Infrastructure- 9210 Sky Park Court #200 San Diego, CA 92123	Reported: 8/25/2017 9:39:35AM Project: Alameda Project Number: 5023146096 Project Manager: Kevin Olness
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ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA-8260B

Laboratory: <u>BC Laboratories</u>	SDG: <u>17-20405</u>
Client: <u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project: <u>Alameda</u>
Sequence: <u>1712752</u>	Instrument: <u>MS-V5</u>
Matrix: <u>Water</u>	Calibration: <u>1707017</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	1712752-TUN2	17JUL49.D	07/17/17 23:37
Cal Standard	1712752-CALD	17JUL50.D	07/18/17 00:00
Cal Standard	1712752-CALE	17JUL51.D	07/18/17 00:23
Cal Standard	1712752-CALF	17JUL52.D	07/18/17 00:46
Cal Standard	1712752-CALG	17JUL53.D	07/18/17 01:09
Cal Standard	1712752-CALH	17JUL54.D	07/18/17 01:32
Cal Standard	1712752-CALI	17JUL55.D	07/18/17 01:55
MS Tune	1712752-TUN1	20JUL02.D	07/20/17 08:09
Cal Standard	1712752-CAL1	20JUL03.D	07/20/17 08:32
Cal Standard	1712752-CAL2	20JUL05.D	07/20/17 09:18
Cal Standard	1712752-CAL3	20JUL06.D	07/20/17 09:42
Cal Standard	1712752-CAL4	20JUL07.D	07/20/17 10:05
Cal Standard	1712752-CAL5	20JUL08.D	07/20/17 10:28
Cal Standard	1712752-CAL6	20JUL09.D	07/20/17 10:51
Cal Standard	1712752-CAL7	20JUL15.D	07/20/17 13:09
Cal Standard	1712752-CAL8	20JUL17.D	07/20/17 13:55
Cal Standard	1712752-CAL9	20JUL18.D	07/20/17 14:18
Cal Standard	1712752-CALA	20JUL19.D	07/20/17 14:41
Cal Standard	1712752-CALB	20JUL20.D	07/20/17 15:04
Cal Standard	1712752-CALC	20JUL21.D	07/20/17 15:27



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

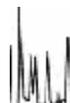
Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713390</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713390-ICV1	20JUL12.D	07/20/17 12:00
Initial Cal Blank	1713390-ICB1	20JUL14.D	07/20/17 12:46
Initial Cal Check	1713390-ICV2	20JUL24.D	07/20/17 16:36
Initial Cal Blank	1713390-ICB2	20JUL26.D	07/20/17 17:22
MS Tune	1713390-TUN1	28JUL62.D	07/29/17 06:53
Calibration Check	1713390-CCV1	28JUL63.D	07/29/17 07:16
Calibration Check	1713390-CCV2	28JUL64.D	07/29/17 07:39
Calibration Blank	1713390-CCB1	28JUL65.D	07/29/17 08:02
Blank	B[G2492-BLK1	29JUL01.D	07/29/17 14:32
27MW01_170725	1720405-16	29JUL02.D	07/29/17 14:55
LCS	B[G2492-BS1	29JUL03.D	07/29/17 15:18
27MW01_170725	B[G2492-MS1	29JUL04.D	07/29/17 15:41
27MW01_170725	B[G2492-MSD1	29JUL05.D	07/29/17 16:04
27EW-17_170725	1720405-15	29JUL10.D	07/29/17 17:59
MS Tune	1713390-TUN2	29JUL12.D	07/29/17 18:45
Calibration Check	1713390-CCV3	29JUL13.D	07/29/17 19:08
Calibration Check	1713390-CCV4	29JUL14.D	07/29/17 19:31
Calibration Blank	1713390-CCB2	29JUL15.D	07/29/17 19:54
27EW-03_170725	1720405-02	29JUL16.D	07/29/17 20:17
27EW-04_170725	1720405-03	29JUL17.D	07/29/17 20:40
27EW-08_170725	1720405-04	29JUL18.D	07/29/17 21:03
27EW-02_170725	1720405-01	29JUL19.D	07/29/17 21:26
27EW-14_170725	1720405-05	29JUL20.D	07/29/17 21:49
27EW-18_170725	1720405-06	29JUL21.D	07/29/17 22:12
DUP07_170725	1720405-10	29JUL22.D	07/29/17 22:35
27EW-13_170725	1720405-13	29JUL23.D	07/29/17 22:58



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713390 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
27EW-16_170725	1720405-14	29JUL24.D	07/29/17 23:21
27MW14_170725	1720405-17	29JUL25.D	07/29/17 23:44
DUP08_170725	1720405-18	29JUL26.D	07/30/17 00:07
EB24_170725	1720405-19	29JUL27.D	07/30/17 00:30
EB25_170725	1720405-20	29JUL28.D	07/30/17 00:53
EB26_170725	1720405-21	29JUL29.D	07/30/17 01:16
TB15_170725	1720405-22	29JUL30.D	07/30/17 01:39
MS Tune	1713390-TUN3	29JUL42.D	07/30/17 06:14
Calibration Check	1713390-CCV5	29JUL43.D	07/30/17 06:36
Calibration Check	1713390-CCV6	29JUL44.D	07/30/17 06:59
Calibration Blank	1713390-CCB3	29JUL45.D	07/30/17 07:22



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ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713392 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713392-ICV1	20JUL12.D	07/20/17 12:00
Initial Cal Blank	1713392-ICB1	20JUL14.D	07/20/17 12:46
Initial Cal Check	1713392-ICV2	20JUL24.D	07/20/17 16:36
Initial Cal Blank	1713392-ICB2	20JUL26.D	07/20/17 17:22
MS Tune	1713392-TUN1	30JUL01.D	07/30/17 07:45
Calibration Check	1713392-CCV1	30JUL02.D	07/30/17 08:08
Calibration Check	1713392-CCV2	30JUL03.D	07/30/17 08:31
Calibration Blank	1713392-CCB1	30JUL05.D	07/30/17 09:17
27EW-17_170725	1720405-15RE1	30JUL27.D	07/30/17 17:43
MS Tune	1713392-TUN2	30JUL32.D	07/30/17 19:38
Calibration Check	1713392-CCV4	30JUL33.D	07/30/17 20:01
Calibration Check	1713392-CCV5	30JUL34.D	07/30/17 20:24
Calibration Blank	1713392-CCB2	30JUL36.D	07/30/17 21:10



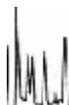
AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>20JUL02.D</u>	Injection Date:	<u>07/20/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>08:09</u>
Sequence:	<u>1712752</u>	Lab Sample ID:	<u>1712752-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	20.8	PASS
Mass 75	30 - 60% of Mass 95	40.3	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	8.2	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	53.7	PASS
Mass 175	5 - 9% of Mass 174	6.24	PASS
Mass 176	95 - 101% of Mass 174	98.1	PASS
Mass 177	5 - 9% of Mass 176	8.19	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>17JUL49.D</u>	Injection Date:	<u>07/17/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>23:37</u>
Sequence:	<u>1712752</u>	Lab Sample ID:	<u>1712752-TUN2</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	19.3	PASS
Mass 75	30 - 60% of Mass 95	38.6	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	7.2	PASS
Mass 173	Less than 2% of Mass 174	0.531	PASS
Mass 174	50 - 100% of Mass 95	72.4	PASS
Mass 175	5 - 9% of Mass 174	7.55	PASS
Mass 176	95 - 101% of Mass 174	96.6	PASS
Mass 177	5 - 9% of Mass 176	6.03	PASS



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Project Manager: Kevin Olness

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>28JUL62.D</u>	Injection Date:	<u>07/29/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>06:53</u>
Sequence:	<u>1713390</u>	Lab Sample ID:	<u>1713390-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	19.6	PASS
Mass 75	30 - 60% of Mass 95	44.7	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.7	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	71.9	PASS
Mass 175	5 - 9% of Mass 174	7.47	PASS
Mass 176	95 - 101% of Mass 174	99.4	PASS
Mass 177	5 - 9% of Mass 176	5.41	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>29JUL12.D</u>	Injection Date:	<u>07/29/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>18:45</u>
Sequence:	<u>1713390</u>	Lab Sample ID:	<u>1713390-TUN2</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	16.8	PASS
Mass 75	30 - 60% of Mass 95	40.1	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	7.09	PASS
Mass 173	Less than 2% of Mass 174	0.759	PASS
Mass 174	50 - 100% of Mass 95	86.6	PASS
Mass 175	5 - 9% of Mass 174	8.86	PASS
Mass 176	95 - 101% of Mass 174	97	PASS
Mass 177	5 - 9% of Mass 176	5.33	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>29JUL42.D</u>	Injection Date:	<u>07/30/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>06:14</u>
Sequence:	<u>1713390</u>	Lab Sample ID:	<u>1713390-TUN3</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	24.7	PASS
Mass 75	30 - 60% of Mass 95	42.9	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	5.99	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	71.3	PASS
Mass 175	5 - 9% of Mass 174	8.38	PASS
Mass 176	95 - 101% of Mass 174	99.2	PASS
Mass 177	5 - 9% of Mass 176	5.76	PASS



AMEC Environmental & Infrastructure-
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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>30JUL01.D</u>	Injection Date:	<u>07/30/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>07:45</u>
Sequence:	<u>1713392</u>	Lab Sample ID:	<u>1713392-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	18.1	PASS
Mass 75	30 - 60% of Mass 95	40.7	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.76	PASS
Mass 173	Less than 2% of Mass 174	0.758	PASS
Mass 174	50 - 100% of Mass 95	77.3	PASS
Mass 175	5 - 9% of Mass 174	8.8	PASS
Mass 176	95 - 101% of Mass 174	97	PASS
Mass 177	5 - 9% of Mass 176	6.55	PASS



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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>30JUL32.D</u>	Injection Date:	<u>07/30/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>19:38</u>
Sequence:	<u>1713392</u>	Lab Sample ID:	<u>1713392-TUN2</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	22.4	PASS
Mass 75	30 - 60% of Mass 95	42.8	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	7.61	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	78.3	PASS
Mass 175	5 - 9% of Mass 174	6.99	PASS
Mass 176	95 - 101% of Mass 174	97.2	PASS
Mass 177	5 - 9% of Mass 176	6.92	PASS



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Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>20JUL12.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713390</u>	Injection Date:	<u>07/20/17</u>
Lab Sample ID:	<u>1713390-ICV1</u>	Injection Time:	<u>12:00</u>

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	24.890	2.047739	2.039122		-0.4	20
Bromobenzene	A	25.000	25.230	1.167814	1.17861		0.9	20
Bromochloromethane	A	25.000	24.530	0.1664346	0.1632807		-1.9	20
Bromodichloromethane	A	25.000	25.280	0.2878825	0.2911282		1.1	20
Bromoform	A	25.000	26.740	0.245463	0.2625679	0.1	7.0	20
Bromomethane	A	25.000	25.110	0.406522	0.4083079		0.4	20
n-Butylbenzene	A	25.000	26.100	4.798501	5.009032		4.4	20
sec-Butylbenzene	A	25.000	26.640	6.314385	6.729672		6.6	20
tert-Butylbenzene	A	25.000	25.400	4.660614	4.735605		1.6	20
Carbon tetrachloride	A	25.000	25.480	0.449341	0.457984		1.9	20
Chlorobenzene	A	25.000	23.360	3.316137	3.09848	0.3	-6.6	20
Chloroethane	A	25.000	24.110	0.5145747	0.4963064		-3.6	20
Chloroform	A	25.000	24.930	0.7571101	0.7548645		-0.3	20
Chloromethane	A	25.000	21.800	0.9407238	0.8204025	0.1	-12.8	20
2-Chlorotoluene	A	25.000	24.160	4.677137	4.5199		-3.4	20
4-Chlorotoluene	A	25.000	24.370	4.223867	4.117292		-2.5	20
Dibromochloromethane	A	25.000	26.550	0.1504286	0.1597323		6.2	20
1,2-Dibromo-3-chloropropane	A	25.000	28.170	7.330085E-02	0.0826084		12.7	20
1,2-Dibromoethane	A	25.000	26.200	0.1293784	0.1355752		4.8	20
Dibromomethane	A	25.000	26.740	9.576412E-02	0.1024155		6.9	20
1,2-Dichlorobenzene	A	25.000	24.020	2.15653	2.071804		-3.9	20
1,3-Dichlorobenzene	A	25.000	24.340	2.49992	2.433885		-2.6	20
1,4-Dichlorobenzene	A	25.000	24.380	2.443238	2.382478		-2.5	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Instrument ID: MS-V5

Calibration: 1707017

Lab File ID: 20JUL12.D

Calibration Date: 07/18/17 00:46

Sequence: 1713390

Injection Date: 07/20/17

Lab Sample ID: 1713390-ICV1

Injection Time: 12:00

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	26.330	0.4975939	0.5240701		5.3	20
1,1-Dichloroethane	A	25.000	25.490	1.070106	1.090882	0.1	1.9	20
1,2-Dichloroethane	A	25.000	24.460	0.4067953	0.3979766		-2.2	20
1,1-Dichloroethene	A	25.000	25.940	0.8069668	0.8371807		3.7	20
cis-1,2-Dichloroethene	A	25.000	25.330	0.5222008	0.5290657		1.3	20
trans-1,2-Dichloroethene	A	25.000	26.540	0.5009588	0.5318602		6.2	20
1,2-Dichloropropane	A	25.000	24.220	0.379403	0.3675628		-3.1	20
1,3-Dichloropropane	A	25.000	23.670	0.2528371	0.2393712		-5.3	20
2,2-Dichloropropane	A	25.000	25.930	0.602219	0.6245229		3.7	20
1,1-Dichloropropene	A	25.000	24.420	0.6845791	0.6686965		-2.3	20
cis-1,3-Dichloropropene	A	25.000	26.090	0.3594295	0.375053		4.3	20
trans-1,3-Dichloropropene	A	25.000	26.130	0.2346113	0.2452383		4.5	20
Ethylbenzene	A	25.000	25.810	1.948304	2.0114		3.2	20
Hexachlorobutadiene	A	25.000	25.210	0.86466	0.872002		0.8	20
Isopropylbenzene	A	25.000	26.250	5.700983	5.985719		5.0	20
p-Isopropyltoluene	A	25.000	26.690	5.149437	5.497681		6.8	20
Methylene chloride	A	25.000	24.890	0.4314876	0.4296029		-0.4	20
Methyl t-butyl ether	A	25.000	25.570	0.603852	0.6175321		2.3	20
Naphthalene	A	25.000	26.500	1.569043	1.6633		6.0	20
n-Propylbenzene	A	25.000	24.270	7.403456	7.187232		-2.9	20
Styrene	A	25.000	26.450	3.356924	3.551577		5.8	20
1,1,1,2-Tetrachloroethane	A	25.000	26.860	0.8160317	0.8766748		7.4	20
1,1,2,2-Tetrachloroethane	A	25.000	25.920	0.5437402	0.5638488	0.3	3.7	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
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Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-V5 Calibration: 1707017
Lab File ID: 20JUL12.D Calibration Date: 07/18/17 00:46
Sequence: 1713390 Injection Date: 07/20/17
Lab Sample ID: 1713390-ICV1 Injection Time: 12:00

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	25.470	0.3290699	0.3353122		1.9	20
Toluene	A	25.000	24.960	0.8662846	0.8648716		-0.2	20
1,2,3-Trichlorobenzene	A	25.000	26.670	1.048181	1.118245		6.7	20
1,2,4-Trichlorobenzene	A	25.000	27.060	1.248966	1.351767		8.2	20
1,1,1-Trichloroethane	A	25.000	25.790	0.6553918	0.6760837		3.2	20
1,1,2-Trichloroethane	A	25.000	25.220	0.1556498	0.1570429		0.9	20
Trichloroethene	A	25.000	25.390	0.3434012	0.3487116		1.5	20
Trichlorofluoromethane	A	25.000	25.570	0.6158835	0.6299322		2.3	20
1,2,3-Trichloropropane	A	25.000	25.960	0.1156016	0.1200231		3.8	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	26.470	0.4228091	0.4476203		5.9	20
1,2,4-Trimethylbenzene	A	25.000	26.050	4.672745	4.868982		4.2	20
1,3,5-Trimethylbenzene	A	25.000	27.000	4.717828	5.09494		8.0	20
Vinyl chloride	A	25.000	24.480	0.7494116	0.7337211		-2.1	20
Total Xylenes	A	75.000	76.780	2.323025	2.378206		2.4	20
p- & m-Xylenes	A	50.000	51.130	2.383338	2.437307		2.3	20
o-Xylene	A	25.000	25.650	2.2024	2.260003		2.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Instrument ID: MS-V5

Calibration: 1707017

Lab File ID: 20JUL24.D

Calibration Date: 07/18/17 00:46

Sequence: 1713390

Injection Date: 07/20/17

Lab Sample ID: 1713390-ICV2

Injection Time: 16:36

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	311.29	4.120558E-02	4.008438E-02		-2.7	20
Acetonitrile	A	160.00	156.48	1.962376E-02	1.919169E-02		-2.2	20
Acrolein	A	200.00	192.76	1.822349E-02	1.756349E-02		-3.6	20
Acrylonitrile	A	80.000	79.220	6.794017E-02	0.0672776		-1.0	20
Allyl chloride	A	32.000	30.910	1.003175	0.9689626		-3.4	20
t-Amyl Methyl ether	A	16.000	15.740	0.6727663	0.6619595		-1.6	20
Benzyl chloride	L	32.000	28.550	0.5754497	0.592096		-10.8	20
t-Butyl alcohol	A	800.00	778.65	0.0118311	1.151529E-02		-2.7	20
Carbon disulfide	A	32.000	30.220	1.516116	1.431992		-5.5	20
Chloroprene	A	32.000	29.870	1.054363	0.9841485		-6.7	20
trans-1,4-Dichloro-2-butene	A	80.000	79.090	0.1052838	0.1040847		-1.1	20
Diisopropyl ether	A	16.000	15.560	0.3736986	0.3634691		-2.7	20
Ethanol	A	4000.0	3929.6	1.803136E-03	1.771401E-03		-1.8	20
Ethyl methacrylate	A	80.000	75.790	0.1707978	0.1618078		-5.3	20
Ethyl t-butyl ether	A	16.000	14.950	1.222825	1.142353		-6.6	20
2-Hexanone	A	320.00	300.02	7.579232E-02	7.106038E-02		-6.2	20
Isobutanol	A	400.00	438.87	5.666875E-03	6.217617E-03		9.7	20
Methacrylonitrile	A	160.00	152.91	0.0669583	6.399131E-02		-4.4	20
Methyl ethyl ketone	A	160.00	150.32	7.316144E-02	6.873728E-02		-6.0	20
Methyl iodide	A	32.000	34.400	0.5894983	0.6336396		7.5	20
Methyl isobutyl ketone	A	160.00	150.81	0.1118834	0.1054587		-5.7	20
Methyl methacrylate	A	80.000	76.810	7.466178E-02	7.168095E-02		-4.0	20
Propionitrile	A	400.00	390.39	2.456186E-02	2.397151E-02		-2.4	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>20JUL24.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713390</u>	Injection Date:	<u>07/20/17</u>
Lab Sample ID:	<u>1713390-ICV2</u>	Injection Time:	<u>16:36</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Vinyl acetate	A	160.00	149.46	0.5836509	0.5452114		-6.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-V5 Calibration: 1707017
Lab File ID: 28JUL63.D Calibration Date: 07/18/17 00:46
Sequence: 1713390 Injection Date: 07/29/17
Lab Sample ID: 1713390-CCV1 Injection Time: 07:16

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	21.580	2.047739	1.767726		-13.7	20
Bromobenzene	A	25.000	24.790	1.167814	1.15821		-0.8	20
Bromochloromethane	A	25.000	21.920	0.1664346	0.1459563		-12.3	20
Bromodichloromethane	A	25.000	25.160	0.2878825	0.2897317		0.6	20
Bromoform	A	25.000	25.790	0.245463	0.2532095	0.1	3.2	20
Bromomethane	A	25.000	14.600	0.406522	0.2374641		-41.6	20 *
n-Butylbenzene	A	25.000	23.790	4.798501	4.565414		-4.9	20
sec-Butylbenzene	A	25.000	26.130	6.314385	6.598611		4.5	20
tert-Butylbenzene	A	25.000	25.120	4.660614	4.683275		0.5	20
Carbon tetrachloride	A	25.000	24.160	0.449341	0.4341551		-3.4	20
Chlorobenzene	A	25.000	23.870	3.316137	3.166848	0.3	-4.5	20
Chloroethane	A	25.000	20.800	0.5145747	0.42817		-16.8	20
Chloroform	A	25.000	22.250	0.7571101	0.6739		-11.0	20
Chloromethane	A	25.000	19.610	0.9407238	0.7378277	0.1	-21.6	20 *
2-Chlorotoluene	A	25.000	24.930	4.677137	4.664883		-0.3	20
4-Chlorotoluene	A	25.000	25.000	4.223867	4.223433		-0.01	20
Dibromochloromethane	A	25.000	25.910	0.1504286	0.1559277		3.7	20
1,2-Dibromo-3-chloropropane	A	25.000	23.500	7.330085E-02	6.890953E-02		-6.0	20
1,2-Dibromoethane	A	25.000	23.170	0.1293784	0.1199178		-7.3	20
Dibromomethane	A	25.000	23.840	9.576412E-02	9.133575E-02		-4.6	20
1,2-Dichlorobenzene	A	25.000	25.490	2.15653	2.198707		2.0	20
1,3-Dichlorobenzene	A	25.000	26.110	2.49992	2.611285		4.5	20
1,4-Dichlorobenzene	A	25.000	25.720	2.443238	2.513311		2.9	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure- \$AMCN
Instrument ID: MS-V5
Lab File ID: 28JUL63.D
Sequence: 1713390
Lab Sample ID: 1713390-CCV1

SDG: 17-20405
Project: Alameda
Calibration: 1707017
Calibration Date: 07/18/17 00:46
Injection Date: 07/29/17
Injection Time: 07:16

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	21.490	0.4975939	0.4277497		-14.0	20
1,1-Dichloroethane	A	25.000	21.960	1.070106	0.9400835	0.1	-12.2	20
1,2-Dichloroethane	A	25.000	23.080	0.4067953	0.3755844		-7.7	20
1,1-Dichloroethene	A	25.000	22.810	0.8069668	0.7361917		-8.8	20
cis-1,2-Dichloroethene	A	25.000	21.670	0.5222008	0.4526071		-13.3	20
trans-1,2-Dichloroethene	A	25.000	21.930	0.5009588	0.4395145		-12.3	20
1,2-Dichloropropane	A	25.000	23.260	0.379403	0.3529318		-7.0	20
1,3-Dichloropropane	A	25.000	22.730	0.2528371	0.2298874		-9.1	20
2,2-Dichloropropane	A	25.000	16.800	0.602219	0.4047885		-32.8	20 *
1,1-Dichloropropene	A	25.000	22.300	0.6845791	0.6105503		-10.8	20
cis-1,3-Dichloropropene	A	25.000	23.100	0.3594295	0.3321101		-7.6	20
trans-1,3-Dichloropropene	A	25.000	24.170	0.2346113	0.2268202		-3.3	20
Ethylbenzene	A	25.000	24.810	1.948304	1.93342		-0.8	20
Hexachlorobutadiene	A	25.000	27.520	0.86466	0.9518281		10.1	20
Isopropylbenzene	A	25.000	25.370	5.700983	5.784768		1.5	20
p-Isopropyltoluene	A	25.000	25.540	5.149437	5.260143		2.1	20
Methylene chloride	A	25.000	22.470	0.4314876	0.387834		-10.1	20
Methyl t-butyl ether	A	25.000	20.780	0.603852	0.5018659		-16.9	20
Naphthalene	A	25.000	22.690	1.569043	1.424075		-9.2	20
n-Propylbenzene	A	25.000	23.980	7.403456	7.100845		-4.1	20
Styrene	A	25.000	25.050	3.356924	3.363668		0.2	20
1,1,1,2-Tetrachloroethane	A	25.000	27.260	0.8160317	0.8898494		9.0	20
1,1,2,2-Tetrachloroethane	A	25.000	21.300	0.5437402	0.4633136	0.3	-14.8	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-V5 Calibration: 1707017
Lab File ID: 28JUL63.D Calibration Date: 07/18/17 00:46
Sequence: 1713390 Injection Date: 07/29/17
Lab Sample ID: 1713390-CCV1 Injection Time: 07:16

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	25.990	0.3290699	0.3421246		4.0	20
Toluene	A	25.000	24.550	0.8662846	0.8507023		-1.8	20
1,2,3-Trichlorobenzene	A	25.000	24.130	1.048181	1.011875		-3.5	20
1,2,4-Trichlorobenzene	A	25.000	24.140	1.248966	1.20593		-3.4	20
1,1,1-Trichloroethane	A	25.000	23.380	0.6553918	0.6130413		-6.5	20
1,1,2-Trichloroethane	A	25.000	23.410	0.1556498	0.1457587		-6.4	20
Trichloroethene	A	25.000	27.430	0.3434012	0.3767544		9.7	20
Trichlorofluoromethane	A	25.000	24.320	0.6158835	0.5990339		-2.7	20
1,2,3-Trichloropropane	A	25.000	25.160	0.1156016	0.1163402		0.6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	22.550	0.4228091	0.3814548		-9.8	20
1,2,4-Trimethylbenzene	A	25.000	24.700	4.672745	4.616477		-1.2	20
1,3,5-Trimethylbenzene	A	25.000	25.700	4.717828	4.84899		2.8	20
Vinyl chloride	A	25.000	22.300	0.7494116	0.6685646		-10.8	20
Total Xylenes	A	75.000	74.190	2.323025	2.297861		-1.1	20
p- & m-Xylenes	A	50.000	49.480	2.383338	2.358586		-1.0	20
o-Xylene	A	25.000	24.710	2.2024	2.176413		-1.2	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Instrument ID: MS-V5

Calibration: 1707017

Lab File ID: 28JUL64.D

Calibration Date: 07/18/17 00:46

Sequence: 1713390

Injection Date: 07/29/17

Lab Sample ID: 1713390-CCV2

Injection Time: 07:39

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	313.90	4.120558E-02	0.0404204		-1.9	20
Acetonitrile	A	160.00	149.30	1.962376E-02	1.831165E-02		-6.7	20
Acrolein	A	200.00	206.33	1.822349E-02	0.0187999		3.2	20
Acrylonitrile	A	80.000	75.620	6.794017E-02	6.421637E-02		-5.5	20
Allyl chloride	A	32.000	31.500	1.003175	0.9875835		-1.6	20
t-Amyl Methyl ether	A	16.000	14.910	0.6727663	0.6270481		-6.8	20
Benzyl chloride	L	32.000	32.790	0.5754497	0.6891963		2.5	20
t-Butyl alcohol	A	800.00	752.07	0.0118311	0.0111223		-6.0	20
Carbon disulfide	A	32.000	29.960	1.516116	1.419572		-6.4	20
Chloroprene	A	32.000	31.980	1.054363	1.053582		-0.07	20
trans-1,4-Dichloro-2-butene	A	80.000	78.070	0.1052838	0.1027492		-2.4	20
Diisopropyl ether	A	16.000	14.540	0.3736986	0.339657		-9.1	20
Ethanol	A	4000.0	3882.3	1.803136E-03	1.750075E-03		-2.9	20
Ethyl methacrylate	A	80.000	77.770	0.1707978	0.1660407		-2.8	20
Ethyl t-butyl ether	A	16.000	14.500	1.222825	1.107915		-9.4	20
2-Hexanone	A	320.00	311.20	7.579232E-02	7.370817E-02		-2.7	20
Isobutanol	A	400.00	435.44	5.666875E-03	6.168957E-03		8.9	20
Methacrylonitrile	A	160.00	144.53	0.0669583	6.048485E-02		-9.7	20
Methyl ethyl ketone	A	160.00	145.96	7.316144E-02	6.674202E-02		-8.8	20
Methyl iodide	A	32.000	20.120	0.5894983	0.3707338		-37.1	20 *
Methyl isobutyl ketone	A	160.00	156.52	0.1118834	0.1094501		-2.2	20
Methyl methacrylate	A	80.000	75.640	7.466178E-02	7.059348E-02		-5.4	20
Propionitrile	A	400.00	376.60	2.456186E-02	2.312507E-02		-5.8	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>28JUL64.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713390</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713390-CCV2</u>	Injection Time:	<u>07:39</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Vinyl acetate	A	160.00	152.81	0.5836509	0.55741		-4.5	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>29JUL13.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713390</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713390-CCV3</u>	Injection Time:	<u>19:08</u>

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	23.510	2.047739	1.925468		-6.0	20
Bromobenzene	A	25.000	25.610	1.167814	1.196459		2.5	20
Bromochloromethane	A	25.000	24.350	0.1664346	0.1621029		-2.6	20
Bromodichloromethane	A	25.000	26.380	0.2878825	0.3038005		5.5	20
Bromoform	A	25.000	27.700	0.245463	0.2720094	0.1	10.8	20
Bromomethane	A	25.000	20.360	0.406522	0.3310686		-18.6	20
n-Butylbenzene	A	25.000	25.030	4.798501	4.803651		0.1	20
sec-Butylbenzene	A	25.000	26.440	6.314385	6.67833		5.8	20
tert-Butylbenzene	A	25.000	25.320	4.660614	4.720588		1.3	20
Carbon tetrachloride	A	25.000	26.510	0.449341	0.4764873		6.0	20
Chlorobenzene	A	25.000	24.610	3.316137	3.263916	0.3	-1.6	20
Chloroethane	A	25.000	23.150	0.5145747	0.4765006		-7.4	20
Chloroform	A	25.000	24.070	0.7571101	0.7290623		-3.7	20
Chloromethane	A	25.000	21.330	0.9407238	0.802653	0.1	-14.7	20
2-Chlorotoluene	A	25.000	25.420	4.677137	4.755445		1.7	20
4-Chlorotoluene	A	25.000	25.660	4.223867	4.335711		2.6	20
Dibromochloromethane	A	25.000	27.810	0.1504286	0.167347		11.2	20
1,2-Dibromo-3-chloropropane	A	25.000	25.450	7.330085E-02	7.461046E-02		1.8	20
1,2-Dibromoethane	A	25.000	25.800	0.1293784	0.1335152		3.2	20
Dibromomethane	A	25.000	26.650	9.576412E-02	0.1020684		6.6	20
1,2-Dichlorobenzene	A	25.000	26.580	2.15653	2.2929		6.3	20
1,3-Dichlorobenzene	A	25.000	26.840	2.49992	2.683762		7.4	20
1,4-Dichlorobenzene	A	25.000	26.770	2.443238	2.616157		7.1	20



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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>29JUL13.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713390</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713390-CCV3</u>	Injection Time:	<u>19:08</u>

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	22.830	0.4975939	0.4543621		-8.7	20
1,1-Dichloroethane	A	25.000	24.400	1.070106	1.044386	0.1	-2.4	20
1,2-Dichloroethane	A	25.000	25.660	0.4067953	0.4174814		2.6	20
1,1-Dichloroethene	A	25.000	24.560	0.8069668	0.792836		-1.8	20
cis-1,2-Dichloroethene	A	25.000	23.560	0.5222008	0.4920288		-5.8	20
trans-1,2-Dichloroethene	A	25.000	23.960	0.5009588	0.4801081		-4.2	20
1,2-Dichloropropane	A	25.000	24.490	0.379403	0.3716313		-2.0	20
1,3-Dichloropropane	A	25.000	24.440	0.2528371	0.2472014		-2.2	20
2,2-Dichloropropane	A	25.000	24.750	0.602219	0.5962685		-1.0	20
1,1-Dichloropropene	A	25.000	24.320	0.6845791	0.6660813		-2.7	20
cis-1,3-Dichloropropene	A	25.000	26.500	0.3594295	0.3810343		6.0	20
trans-1,3-Dichloropropene	A	25.000	27.550	0.2346113	0.2585744		10.2	20
Ethylbenzene	A	25.000	24.990	1.948304	1.94736		-0.05	20
Hexachlorobutadiene	A	25.000	27.970	0.86466	0.9674309		11.9	20
Isopropylbenzene	A	25.000	25.750	5.700983	5.872212		3.0	20
p-Isopropyltoluene	A	25.000	26.130	5.149437	5.381946		4.5	20
Methylene chloride	A	25.000	23.250	0.4314876	0.401249		-7.0	20
Methyl t-butyl ether	A	25.000	23.350	0.603852	0.5640362		-6.6	20
Naphthalene	A	25.000	24.660	1.569043	1.547683		-1.4	20
n-Propylbenzene	A	25.000	24.120	7.403456	7.143616		-3.5	20
Styrene	A	25.000	25.610	3.356924	3.438473		2.4	20
1,1,1,2-Tetrachloroethane	A	25.000	27.360	0.8160317	0.8932096		9.5	20
1,1,2,2-Tetrachloroethane	A	25.000	24.740	0.5437402	0.5380329	0.3	-1.0	20



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CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-V5 Calibration: 1707017
Lab File ID: 29JUL13.D Calibration Date: 07/18/17 00:46
Sequence: 1713390 Injection Date: 07/29/17
Lab Sample ID: 1713390-CCV3 Injection Time: 19:08

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	26.800	0.3290699	0.3527796		7.2	20
Toluene	A	25.000	25.740	0.8662846	0.8920847		3.0	20
1,2,3-Trichlorobenzene	A	25.000	26.380	1.048181	1.106182		5.5	20
1,2,4-Trichlorobenzene	A	25.000	26.060	1.248966	1.302167		4.3	20
1,1,1-Trichloroethane	A	25.000	26.050	0.6553918	0.6828873		4.2	20
1,1,2-Trichloroethane	A	25.000	25.370	0.1556498	0.1579774		1.5	20
Trichloroethene	A	25.000	27.130	0.3434012	0.3726847		8.5	20
Trichlorofluoromethane	A	25.000	26.240	0.6158835	0.6464053		5.0	20
1,2,3-Trichloropropane	A	25.000	27.430	0.1156016	0.1268559		9.7	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	24.990	0.4228091	0.4227011		-0.03	20
1,2,4-Trimethylbenzene	A	25.000	25.280	4.672745	4.724814		1.1	20
1,3,5-Trimethylbenzene	A	25.000	26.350	4.717828	4.973225		5.4	20
Vinyl chloride	A	25.000	24.020	0.7494116	0.7198875		-3.9	20
Total Xylenes	A	75.000	74.820	2.323025	2.317054		-0.3	20
p- & m-Xylenes	A	50.000	49.740	2.383338	2.37086		-0.5	20
o-Xylene	A	25.000	25.080	2.2024	2.209442		0.3	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure- \$AMCN
Instrument ID: MS-V5
Lab File ID: 29JUL14.D
Sequence: 1713390
Lab Sample ID: 1713390-CCV4

SDG: 17-20405
Project: Alameda
Calibration: 1707017
Calibration Date: 07/18/17 00:46
Injection Date: 07/29/17
Injection Time: 19:31

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	371.47	4.120558E-02	4.783352E-02		16.1	20
Acetonitrile	A	160.00	180.69	1.962376E-02	2.216184E-02		12.9	20
Acrolein	A	200.00	306.27	1.822349E-02	2.790632E-02		53.1	20 *
Acrylonitrile	A	80.000	87.570	6.794017E-02	7.436904E-02		9.5	20
Allyl chloride	A	32.000	33.010	1.003175	1.034853		3.2	20
t-Amyl Methyl ether	A	16.000	17.290	0.6727663	0.7268828		8.0	20
Benzyl chloride	L	32.000	32.550	0.5754497	0.6836308		1.7	20
t-Butyl alcohol	A	800.00	927.82	0.0118311	1.372138E-02		16.0	20
Carbon disulfide	A	32.000	31.260	1.516116	1.480866		-2.3	20
Chloroprene	A	32.000	33.490	1.054363	1.103507		4.7	20
trans-1,4-Dichloro-2-butene	A	80.000	100.86	0.1052838	0.1327383		26.1	20 *
Diisopropyl ether	A	16.000	15.720	0.3736986	0.3672617		-1.7	20
Ethanol	A	4000.0	4883.3	1.803136E-03	2.201322E-03		22.1	20 *
Ethyl methacrylate	A	80.000	88.980	0.1707978	0.1899761		11.2	20
Ethyl t-butyl ether	A	16.000	16.970	1.222825	1.296979		6.1	20
2-Hexanone	A	320.00	365.64	7.579232E-02	8.660172E-02		14.3	20
Isobutanol	A	400.00	539.24	5.666875E-03	7.639573E-03		34.8	20 *
Methacrylonitrile	A	160.00	168.57	0.0669583	7.054325E-02		5.4	20
Methyl ethyl ketone	A	160.00	177.10	7.316144E-02	8.098083E-02		10.7	20
Methyl iodide	A	32.000	18.880	0.5894983	0.3478054		-41.0	20 *
Methyl isobutyl ketone	A	160.00	183.55	0.1118834	0.1283534		14.7	20
Methyl methacrylate	A	80.000	90.540	7.466178E-02	8.449669E-02		13.2	20
Propionitrile	A	400.00	446.01	2.456186E-02	2.738738E-02		11.5	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Project: Alameda
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Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>29JUL14.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713390</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713390-CCV4</u>	Injection Time:	<u>19:31</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Vinyl acetate	A	160.00	145.78	0.5836509	0.5317928		-8.9	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Instrument ID: MS-V5

Calibration: 1707017

Lab File ID: 29JUL43.D

Calibration Date: 07/18/17 00:46

Sequence: 1713390

Injection Date: 07/30/17

Lab Sample ID: 1713390-CCV5

Injection Time: 06:36

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	27.560	2.047739	2.257275		10.2	20
Bromobenzene	A	25.000	28.950	1.167814	1.352482		15.8	20
Bromochloromethane	A	25.000	28.150	0.1664346	0.1874049		12.6	20
Bromodichloromethane	A	25.000	30.190	0.2878825	0.3475987		20.7	20 *
Bromoform	A	25.000	29.340	0.245463	0.288108	0.1	17.4	20
Bromomethane	A	25.000	15.270	0.406522	0.2483747		-38.9	20 *
n-Butylbenzene	A	25.000	28.870	4.798501	5.541284		15.5	20
sec-Butylbenzene	A	25.000	30.500	6.314385	7.703664		22.0	20 *
tert-Butylbenzene	A	25.000	29.180	4.660614	5.439898		16.7	20
Carbon tetrachloride	A	25.000	31.380	0.449341	0.5640401		25.5	20 *
Chlorobenzene	A	25.000	28.190	3.316137	3.739783	0.3	12.8	20
Chloroethane	A	25.000	26.980	0.5145747	0.5552736		7.9	20
Chloroform	A	25.000	28.530	0.7571101	0.8639873		14.1	20
Chloromethane	A	25.000	24.100	0.9407238	0.9067853	0.1	-3.6	20
2-Chlorotoluene	A	25.000	29.460	4.677137	5.51245		17.9	20
4-Chlorotoluene	A	25.000	29.440	4.223867	4.973957		17.8	20
Dibromochloromethane	A	25.000	31.030	0.1504286	0.1867033		24.1	20 *
1,2-Dibromo-3-chloropropane	A	25.000	26.350	7.330085E-02	7.727037E-02		5.4	20
1,2-Dibromoethane	A	25.000	28.030	0.1293784	0.1450337		12.1	20
Dibromomethane	A	25.000	28.810	9.576412E-02	0.1103662		15.2	20
1,2-Dichlorobenzene	A	25.000	29.360	2.15653	2.532431		17.4	20
1,3-Dichlorobenzene	A	25.000	30.200	2.49992	3.019674		20.8	20 *
1,4-Dichlorobenzene	A	25.000	30.650	2.443238	2.995886		22.6	20 *



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>29JUL43.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713390</u>	Injection Date:	<u>07/30/17</u>
Lab Sample ID:	<u>1713390-CCV5</u>	Injection Time:	<u>06:36</u>

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	34.860	0.4975939	0.6937786		39.4	20 *
1,1-Dichloroethane	A	25.000	27.670	1.070106	1.184434	0.1	10.7	20
1,2-Dichloroethane	A	25.000	29.650	0.4067953	0.482445		18.6	20
1,1-Dichloroethene	A	25.000	29.790	0.8069668	0.9614636		19.1	20
cis-1,2-Dichloroethene	A	25.000	27.770	0.5222008	0.5801351		11.1	20
trans-1,2-Dichloroethene	A	25.000	28.150	0.5009588	0.564171		12.6	20
1,2-Dichloropropane	A	25.000	27.650	0.379403	0.4196421		10.6	20
1,3-Dichloropropane	A	25.000	27.970	0.2528371	0.2828984		11.9	20
2,2-Dichloropropane	A	25.000	31.270	0.602219	0.7532838		25.1	20 *
1,1-Dichloropropene	A	25.000	28.160	0.6845791	0.7710359		12.6	20
cis-1,3-Dichloropropene	A	25.000	28.720	0.3594295	0.4129284		14.9	20
trans-1,3-Dichloropropene	A	25.000	30.270	0.2346113	0.2840594		21.1	20 *
Ethylbenzene	A	25.000	29.260	1.948304	2.280148		17.0	20
Hexachlorobutadiene	A	25.000	31.620	0.86466	1.093629		26.5	20 *
Isopropylbenzene	A	25.000	29.970	5.700983	6.834307		19.9	20
p-Isopropyltoluene	A	25.000	30.440	5.149437	6.27061		21.8	20 *
Methylene chloride	A	25.000	26.560	0.4314876	0.4583906		6.2	20
Methyl t-butyl ether	A	25.000	26.450	0.603852	0.6388331		5.8	20
Naphthalene	A	25.000	24.680	1.569043	1.548776		-1.3	20
n-Propylbenzene	A	25.000	28.020	7.403456	8.298254		12.1	20
Styrene	A	25.000	29.900	3.356924	4.014945		19.6	20
1,1,1,2-Tetrachloroethane	A	25.000	31.640	0.8160317	1.032907		26.6	20 *
1,1,2,2-Tetrachloroethane	A	25.000	27.460	0.5437402	0.5973365	0.3	9.9	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>29JUL43.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713390</u>	Injection Date:	<u>07/30/17</u>
Lab Sample ID:	<u>1713390-CCV5</u>	Injection Time:	<u>06:36</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	34.820	0.3290699	0.4582841		39.3	20 *
Toluene	A	25.000	29.730	0.8662846	1.03024		18.9	20
1,2,3-Trichlorobenzene	A	25.000	25.740	1.048181	1.079105		3.0	20
1,2,4-Trichlorobenzene	A	25.000	27.520	1.248966	1.374986		10.1	20
1,1,1-Trichloroethane	A	25.000	30.480	0.6553918	0.7990752		21.9	20 *
1,1,2-Trichloroethane	A	25.000	27.830	0.1556498	0.1732905		11.3	20
Trichloroethene	A	25.000	30.830	0.3434012	0.4234606		23.3	20 *
Trichlorofluoromethane	A	25.000	31.710	0.6158835	0.7812937		26.9	20 *
1,2,3-Trichloropropane	A	25.000	31.520	0.1156016	0.1457717		26.1	20 *
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	30.250	0.4228091	0.5116096		21.0	20 *
1,2,4-Trimethylbenzene	A	25.000	29.020	4.672745	5.423376		16.1	20
1,3,5-Trimethylbenzene	A	25.000	30.410	4.717828	5.738687		21.6	20 *
Vinyl chloride	A	25.000	27.930	0.7494116	0.8370972		11.7	20
Total Xylenes	A	75.000	86.850	2.323025	2.689946		15.8	20
p- & m-Xylenes	A	50.000	57.830	2.383338	2.756733		15.7	20
o-Xylene	A	25.000	29.020	2.2024	2.556372		16.1	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Instrument ID: MS-V5

Calibration: 1707017

Lab File ID: 29JUL44.D

Calibration Date: 07/18/17 00:46

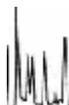
Sequence: 1713390

Injection Date: 07/30/17

Lab Sample ID: 1713390-CCV6

Injection Time: 06:59

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	302.16	4.120558E-02	3.890852E-02		-5.6	20
Acetonitrile	A	160.00	149.40	1.962376E-02	1.832334E-02		-6.6	20
Acrolein	A	200.00	243.76	1.822349E-02	2.221092E-02		21.9	20 *
Acrylonitrile	A	80.000	73.390	6.794017E-02	6.232372E-02		-8.3	20
Allyl chloride	A	32.000	29.700	1.003175	0.9309227		-7.2	20
t-Amyl Methyl ether	A	16.000	14.230	0.6727663	0.5981782		-11.1	20
Benzyl chloride	L	32.000	31.460	0.5754497	0.6585815		-1.7	20
t-Butyl alcohol	A	800.00	776.47	0.0118311	0.0114831		-2.9	20
Carbon disulfide	A	32.000	28.610	1.516116	1.355633		-10.6	20
Chloroprene	A	32.000	30.820	1.054363	1.015441		-3.7	20
trans-1,4-Dichloro-2-butene	A	80.000	49.120	0.1052838	6.463849E-02		-38.6	20 *
Diisopropyl ether	A	16.000	14.150	0.3736986	0.3305849		-11.5	20
Ethanol	A	4000.0	3888.4	1.803136E-03	1.752823E-03		-2.8	20
Ethyl methacrylate	A	80.000	73.850	0.1707978	0.1576598		-7.7	20
Ethyl t-butyl ether	A	16.000	14.370	1.222825	1.097996		-10.2	20
2-Hexanone	A	320.00	308.77	7.579232E-02	7.313156E-02		-3.5	20
Isobutanol	A	400.00	438.12	5.666875E-03	6.206877E-03		9.5	20
Methacrylonitrile	A	160.00	142.02	0.0669583	5.943329E-02		-11.2	20
Methyl ethyl ketone	A	160.00	143.00	7.316144E-02	6.538726E-02		-10.6	20
Methyl iodide	A	32.000	14.510	0.5894983	0.2672526		-54.7	20 *
Methyl isobutyl ketone	A	160.00	153.86	0.1118834	0.1075918		-3.8	20
Methyl methacrylate	A	80.000	74.930	7.466178E-02	6.993055E-02		-6.3	20
Propionitrile	A	400.00	382.04	2.456186E-02	2.345924E-02		-4.5	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>29JUL44.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713390</u>	Injection Date:	<u>07/30/17</u>
Lab Sample ID:	<u>1713390-CCV6</u>	Injection Time:	<u>06:59</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Vinyl acetate	A	160.00	149.55	0.5836509	0.5455153		-6.5	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Instrument ID: MS-V5

Calibration: 1707017

Lab File ID: 20JUL12.D

Calibration Date: 07/18/17 00:46

Sequence: 1713392

Injection Date: 07/20/17

Lab Sample ID: 1713392-ICV1

Injection Time: 12:00

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	24.890	2.047739	2.039122		-0.4	20
Bromobenzene	A	25.000	25.230	1.167814	1.17861		0.9	20
Bromochloromethane	A	25.000	24.530	0.1664346	0.1632807		-1.9	20
Bromodichloromethane	A	25.000	25.280	0.2878825	0.2911282		1.1	20
Bromoform	A	25.000	26.740	0.245463	0.2625679	0.1	7.0	20
Bromomethane	A	25.000	25.110	0.406522	0.4083079		0.4	20
n-Butylbenzene	A	25.000	26.100	4.798501	5.009032		4.4	20
sec-Butylbenzene	A	25.000	26.640	6.314385	6.729672		6.6	20
tert-Butylbenzene	A	25.000	25.400	4.660614	4.735605		1.6	20
Carbon tetrachloride	A	25.000	25.480	0.449341	0.457984		1.9	20
Chlorobenzene	A	25.000	23.360	3.316137	3.09848	0.3	-6.6	20
Chloroethane	A	25.000	24.110	0.5145747	0.4963064		-3.6	20
Chloroform	A	25.000	24.930	0.7571101	0.7548645		-0.3	20
Chloromethane	A	25.000	21.800	0.9407238	0.8204025	0.1	-12.8	20
2-Chlorotoluene	A	25.000	24.160	4.677137	4.5199		-3.4	20
4-Chlorotoluene	A	25.000	24.370	4.223867	4.117292		-2.5	20
Dibromochloromethane	A	25.000	26.550	0.1504286	0.1597323		6.2	20
1,2-Dibromo-3-chloropropane	A	25.000	28.170	7.330085E-02	0.0826084		12.7	20
1,2-Dibromoethane	A	25.000	26.200	0.1293784	0.1355752		4.8	20
Dibromomethane	A	25.000	26.740	9.576412E-02	0.1024155		6.9	20
1,2-Dichlorobenzene	A	25.000	24.020	2.15653	2.071804		-3.9	20
1,3-Dichlorobenzene	A	25.000	24.340	2.49992	2.433885		-2.6	20
1,4-Dichlorobenzene	A	25.000	24.380	2.443238	2.382478		-2.5	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure- \$AMCN
Instrument ID: MS-V5
Lab File ID: 20JUL12.D
Sequence: 1713392
Lab Sample ID: 1713392-ICV1

SDG: 17-20405
Project: Alameda
Calibration: 1707017
Calibration Date: 07/18/17 00:46
Injection Date: 07/20/17
Injection Time: 12:00

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	26.330	0.4975939	0.5240701		5.3	20
1,1-Dichloroethane	A	25.000	25.490	1.070106	1.090882	0.1	1.9	20
1,2-Dichloroethane	A	25.000	24.460	0.4067953	0.3979766		-2.2	20
1,1-Dichloroethene	A	25.000	25.940	0.8069668	0.8371807		3.7	20
cis-1,2-Dichloroethene	A	25.000	25.330	0.5222008	0.5290657		1.3	20
trans-1,2-Dichloroethene	A	25.000	26.540	0.5009588	0.5318602		6.2	20
1,2-Dichloropropane	A	25.000	24.220	0.379403	0.3675628		-3.1	20
1,3-Dichloropropane	A	25.000	23.670	0.2528371	0.2393712		-5.3	20
2,2-Dichloropropane	A	25.000	25.930	0.602219	0.6245229		3.7	20
1,1-Dichloropropene	A	25.000	24.420	0.6845791	0.6686965		-2.3	20
cis-1,3-Dichloropropene	A	25.000	26.090	0.3594295	0.375053		4.3	20
trans-1,3-Dichloropropene	A	25.000	26.130	0.2346113	0.2452383		4.5	20
Ethylbenzene	A	25.000	25.810	1.948304	2.0114		3.2	20
Hexachlorobutadiene	A	25.000	25.210	0.86466	0.872002		0.8	20
Isopropylbenzene	A	25.000	26.250	5.700983	5.985719		5.0	20
p-Isopropyltoluene	A	25.000	26.690	5.149437	5.497681		6.8	20
Methylene chloride	A	25.000	24.890	0.4314876	0.4296029		-0.4	20
Methyl t-butyl ether	A	25.000	25.570	0.603852	0.6175321		2.3	20
Naphthalene	A	25.000	26.500	1.569043	1.6633		6.0	20
n-Propylbenzene	A	25.000	24.270	7.403456	7.187232		-2.9	20
Styrene	A	25.000	26.450	3.356924	3.551577		5.8	20
1,1,1,2-Tetrachloroethane	A	25.000	26.860	0.8160317	0.8766748		7.4	20
1,1,2,2-Tetrachloroethane	A	25.000	25.920	0.5437402	0.5638488	0.3	3.7	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>20JUL12.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713392</u>	Injection Date:	<u>07/20/17</u>
Lab Sample ID:	<u>1713392-ICV1</u>	Injection Time:	<u>12:00</u>

COMPOUND	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	25.470	0.3290699	0.3353122		1.9	20
Toluene	A	25.000	24.960	0.8662846	0.8648716		-0.2	20
1,2,3-Trichlorobenzene	A	25.000	26.670	1.048181	1.118245		6.7	20
1,2,4-Trichlorobenzene	A	25.000	27.060	1.248966	1.351767		8.2	20
1,1,1-Trichloroethane	A	25.000	25.790	0.6553918	0.6760837		3.2	20
1,1,2-Trichloroethane	A	25.000	25.220	0.1556498	0.1570429		0.9	20
Trichloroethene	A	25.000	25.390	0.3434012	0.3487116		1.5	20
Trichlorofluoromethane	A	25.000	25.570	0.6158835	0.6299322		2.3	20
1,2,3-Trichloropropane	A	25.000	25.960	0.1156016	0.1200231		3.8	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	26.470	0.4228091	0.4476203		5.9	20
1,2,4-Trimethylbenzene	A	25.000	26.050	4.672745	4.868982		4.2	20
1,3,5-Trimethylbenzene	A	25.000	27.000	4.717828	5.09494		8.0	20
Vinyl chloride	A	25.000	24.480	0.7494116	0.7337211		-2.1	20
Total Xylenes	A	75.000	76.780	2.323025	2.378206		2.4	20
2-Chloroethyl vinyl ether	A	100.00	102.27	9.798764E-02	0.1002161		2.3	20
p- & m-Xylenes	A	50.000	51.130	2.383338	2.437307		2.3	20
o-Xylene	A	25.000	25.650	2.2024	2.260003		2.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



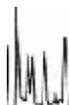
AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>20JUL24.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713392</u>	Injection Date:	<u>07/20/17</u>
Lab Sample ID:	<u>1713392-ICV2</u>	Injection Time:	<u>16:36</u>

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	311.29	4.120558E-02	4.008438E-02		-2.7	20
Acetonitrile	A	160.00	156.48	1.962376E-02	1.919169E-02		-2.2	20
Acrolein	A	200.00	192.76	1.822349E-02	1.756349E-02		-3.6	20
Acrylonitrile	A	80.000	79.220	6.794017E-02	0.0672776		-1.0	20
Allyl chloride	A	32.000	30.910	1.003175	0.9689626		-3.4	20
t-Amyl Methyl ether	A	16.000	15.740	0.6727663	0.6619595		-1.6	20
Benzyl chloride	L	32.000	28.550	0.5754497	0.592096		-10.8	20
t-Butyl alcohol	A	800.00	778.65	0.0118311	1.151529E-02		-2.7	20
Carbon disulfide	A	32.000	30.220	1.516116	1.431992		-5.5	20
Chloroprene	A	32.000	29.870	1.054363	0.9841485		-6.7	20
trans-1,4-Dichloro-2-butene	A	80.000	79.090	0.1052838	0.1040847		-1.1	20
Diisopropyl ether	A	16.000	15.560	0.3736986	0.3634691		-2.7	20
1,4-Dioxane	A	2000.0	1947.0	9.091868E-04	8.850741E-04		-2.7	20
Ethanol	A	4000.0	3929.6	1.803136E-03	1.771401E-03		-1.8	20
Ethyl methacrylate	A	80.000	75.790	0.1707978	0.1618078		-5.3	20
Ethyl t-butyl ether	A	16.000	14.950	1.222825	1.142353		-6.6	20
2-Hexanone	A	320.00	300.02	7.579232E-02	7.106038E-02		-6.2	20
Isobutanol	A	400.00	438.87	5.666875E-03	6.217617E-03		9.7	20
Methacrylonitrile	A	160.00	152.91	0.0669583	6.399131E-02		-4.4	20
Methyl ethyl ketone	A	160.00	150.32	7.316144E-02	6.873728E-02		-6.0	20
Methyl iodide	A	32.000	34.400	0.5894983	0.6336396		7.5	20
Methyl isobutyl ketone	A	160.00	150.81	0.1118834	0.1054587		-5.7	20
Methyl methacrylate	A	80.000	76.810	7.466178E-02	7.168095E-02		-4.0	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>20JUL24.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713392</u>	Injection Date:	<u>07/20/17</u>
Lab Sample ID:	<u>1713392-ICV2</u>	Injection Time:	<u>16:36</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Propionitrile	A	400.00	390.39	2.456186E-02	2.397151E-02		-2.4	20
Vinyl acetate	A	160.00	149.46	0.5836509	0.5452114		-6.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Instrument ID: MS-V5

Calibration: 1707017

Lab File ID: 30JUL02.D

Calibration Date: 07/18/17 00:46

Sequence: 1713392

Injection Date: 07/30/17

Lab Sample ID: 1713392-CCV1

Injection Time: 08:08

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	23.220	2.047739	1.901793		-7.1	20
Bromobenzene	A	25.000	26.810	1.167814	1.252293		7.2	20
Bromochloromethane	A	25.000	24.050	0.1664346	0.1601318		-3.8	20
Bromodichloromethane	A	25.000	25.110	0.2878825	0.2891894		0.5	20
Bromoform	A	25.000	27.720	0.245463	0.2721276	0.1	10.9	20
Bromomethane	A	25.000	15.360	0.406522	0.2497243		-38.6	20 *
n-Butylbenzene	A	25.000	26.410	4.798501	5.068905		5.6	20
sec-Butylbenzene	A	25.000	28.090	6.314385	7.095646		12.4	20
tert-Butylbenzene	A	25.000	29.540	4.660614	5.506314		18.1	20
Carbon tetrachloride	A	25.000	26.460	0.449341	0.4756045		5.8	20
Chlorobenzene	A	25.000	26.180	3.316137	3.473141	0.3	4.7	20
Chloroethane	A	25.000	22.290	0.5145747	0.4587067		-10.9	20
Chloroform	A	25.000	23.870	0.7571101	0.7227556		-4.5	20
Chloromethane	A	25.000	20.090	0.9407238	0.7559592	0.1	-19.6	20
2-Chlorotoluene	A	25.000	27.120	4.677137	5.073451		8.5	20
4-Chlorotoluene	A	25.000	27.810	4.223867	4.6979		11.2	20
Dibromochloromethane	A	25.000	27.080	0.1504286	0.1629419		8.3	20
1,2-Dibromo-3-chloropropane	A	25.000	22.710	7.330085E-02	6.659671E-02		-9.1	20
1,2-Dibromoethane	A	25.000	24.290	0.1293784	0.1257073		-2.8	20
Dibromomethane	A	25.000	25.090	9.576412E-02	9.609442E-02		0.3	20
1,2-Dichlorobenzene	A	25.000	26.910	2.15653	2.32156		7.7	20
1,3-Dichlorobenzene	A	25.000	27.980	2.49992	2.797482		11.9	20
1,4-Dichlorobenzene	A	25.000	28.140	2.443238	2.750025		12.6	20



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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>30JUL02.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713392</u>	Injection Date:	<u>07/30/17</u>
Lab Sample ID:	<u>1713392-CCV1</u>	Injection Time:	<u>08:08</u>

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	28.360	0.4975939	0.5645478		13.5	20
1,1-Dichloroethane	A	25.000	23.360	1.070106	0.9996968	0.1	-6.6	20
1,2-Dichloroethane	A	25.000	25.710	0.4067953	0.4183324		2.8	20
1,1-Dichloroethene	A	25.000	24.570	0.8069668	0.7930036		-1.7	20
cis-1,2-Dichloroethene	A	25.000	23.450	0.5222008	0.4899196		-6.2	20
trans-1,2-Dichloroethene	A	25.000	24.020	0.5009588	0.4813334		-3.9	20
1,2-Dichloropropane	A	25.000	23.860	0.379403	0.362143		-4.5	20
1,3-Dichloropropane	A	25.000	23.570	0.2528371	0.2383609		-5.7	20
2,2-Dichloropropane	A	25.000	25.830	0.602219	0.62224		3.3	20
1,1-Dichloropropene	A	25.000	24.050	0.6845791	0.65869		-3.8	20
cis-1,3-Dichloropropene	A	25.000	24.980	0.3594295	0.3591182		-0.09	20
trans-1,3-Dichloropropene	A	25.000	26.680	0.2346113	0.2503666		6.7	20
Ethylbenzene	A	25.000	27.040	1.948304	2.107053		8.1	20
Hexachlorobutadiene	A	25.000	29.010	0.86466	1.003484		16.1	20
Isopropylbenzene	A	25.000	27.440	5.700983	6.25794		9.8	20
p-Isopropyltoluene	A	25.000	27.720	5.149437	5.709372		10.9	20
Methylene chloride	A	25.000	22.850	0.4314876	0.394369		-8.6	20
Methyl t-butyl ether	A	25.000	22.290	0.603852	0.5382904		-10.9	20
Naphthalene	A	25.000	22.610	1.569043	1.419124		-9.6	20
n-Propylbenzene	A	25.000	25.900	7.403456	7.669231		3.6	20
Styrene	A	25.000	27.410	3.356924	3.680371		9.6	20
1,1,1,2-Tetrachloroethane	A	25.000	29.080	0.8160317	0.9491823		16.3	20
1,1,2,2-Tetrachloroethane	A	25.000	25.150	0.5437402	0.5469674	0.3	0.6	20



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CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-V5 Calibration: 1707017
Lab File ID: 30JUL02.D Calibration Date: 07/18/17 00:46
Sequence: 1713392 Injection Date: 07/30/17
Lab Sample ID: 1713392-CCV1 Injection Time: 08:08

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	28.400	0.3290699	0.3738295		13.6	20
Toluene	A	25.000	25.030	0.8662846	0.8673506		0.1	20
1,2,3-Trichlorobenzene	A	25.000	23.510	1.048181	0.9858806		-5.9	20
1,2,4-Trichlorobenzene	A	25.000	25.900	1.248966	1.293809		3.6	20
1,1,1-Trichloroethane	A	25.000	25.080	0.6553918	0.6574249		0.3	20
1,1,2-Trichloroethane	A	25.000	23.670	0.1556498	0.1473551		-5.3	20
Trichloroethene	A	25.000	26.390	0.3434012	0.3625558		5.6	20
Trichlorofluoromethane	A	25.000	26.850	0.6158835	0.6613611		7.4	20
1,2,3-Trichloropropane	A	25.000	27.930	0.1156016	0.1291316		11.7	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	25.810	0.4228091	0.4364858		3.2	20
1,2,4-Trimethylbenzene	A	25.000	26.610	4.672745	4.973062		6.4	20
1,3,5-Trimethylbenzene	A	25.000	27.880	4.717828	5.262122		11.5	20
Vinyl chloride	A	25.000	23.670	0.7494116	0.709615		-5.3	20
Total Xylenes	A	75.000	80.390	2.323025	2.490774		7.2	20
2-Chloroethyl vinyl ether	A	100.00	90.560	9.798764E-02	8.873553E-02		-9.4	20
p- & m-Xylenes	A	50.000	53.920	2.383338	2.570331		7.8	20
o-Xylene	A	25.000	26.470	2.2024	2.33166		5.9	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-V5 Calibration: 1707017
Lab File ID: 30JUL03.D Calibration Date: 07/18/17 00:46
Sequence: 1713392 Injection Date: 07/30/17
Lab Sample ID: 1713392-CCV2 Injection Time: 08:31

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	289.64	4.120558E-02	3.729667E-02		-9.5	20
Acetonitrile	A	160.00	137.82	1.962376E-02	1.690362E-02		-13.9	20
Acrolein	A	200.00	242.71	1.822349E-02	2.211538E-02		21.4	20 *
Acrylonitrile	A	80.000	70.710	6.794017E-02	6.005051E-02		-11.6	20
Allyl chloride	A	32.000	27.860	1.003175	0.8733555		-12.9	20
t-Amyl Methyl ether	A	16.000	13.520	0.6727663	0.5685231		-15.5	20
Benzyl chloride	L	32.000	30.740	0.5754497	0.6422178		-3.9	20
t-Butyl alcohol	A	800.00	728.70	0.0118311	1.077669E-02		-8.9	20
Carbon disulfide	A	32.000	25.920	1.516116	1.227832		-19.0	20
Chloroprene	A	32.000	27.560	1.054363	0.9081756		-13.9	20
trans-1,4-Dichloro-2-butene	A	80.000	63.760	0.1052838	8.391578E-02		-20.3	20 *
Diisopropyl ether	A	16.000	13.090	0.3736986	0.3057228		-18.2	20
1,4-Dioxane	A	2000.0	1965.9	9.091868E-04	8.936985E-04		-1.7	20
Ethanol	A	4000.0	3837.6	1.803136E-03	1.729936E-03		-4.1	20
Ethyl methacrylate	A	80.000	73.800	0.1707978	0.1575518		-7.8	20
Ethyl t-butyl ether	A	16.000	13.550	1.222825	1.035346		-15.3	20
2-Hexanone	A	320.00	300.62	7.579232E-02	0.0712027		-6.1	20
Isobutanol	A	400.00	394.94	5.666875E-03	5.595217E-03		-1.3	20
Methacrylonitrile	A	160.00	134.02	0.0669583	5.608404E-02		-16.2	20
Methyl ethyl ketone	A	160.00	139.69	7.316144E-02	6.387398E-02		-12.7	20
Methyl iodide	A	32.000	10.230	0.5894983	0.1884858		-68.0	20 *
Methyl isobutyl ketone	A	160.00	154.71	0.1118834	0.1081847		-3.3	20
Methyl methacrylate	A	80.000	75.400	7.466178E-02	7.036669E-02		-5.8	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>30JUL03.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713392</u>	Injection Date:	<u>07/30/17</u>
Lab Sample ID:	<u>1713392-CCV2</u>	Injection Time:	<u>08:31</u>

COMPOUND	(1) CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Propionitrile	A	400.00	355.58	2.456186E-02	2.183424E-02		-11.1	20
Vinyl acetate	A	160.00	141.89	0.5836509	0.517598		-11.3	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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San Diego, CA 92123

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CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Instrument ID: MS-V5

Calibration: 1707017

Lab File ID: 30JUL33.D

Calibration Date: 07/18/17 00:46

Sequence: 1713392

Injection Date: 07/30/17

Lab Sample ID: 1713392-CCV4

Injection Time: 20:01

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	22.680	2.047739	1.85795		-9.3	20
Bromobenzene	A	25.000	25.070	1.167814	1.17128		0.3	20
Bromochloromethane	A	25.000	23.560	0.1664346	0.1568449		-5.8	20
Bromodichloromethane	A	25.000	26.580	0.2878825	0.3061316		6.3	20
Bromoform	A	25.000	26.120	0.245463	0.2565075	0.1	4.5	20
Bromomethane	A	25.000	14.920	0.406522	0.2426135		-40.3	20 *
n-Butylbenzene	A	25.000	24.220	4.798501	4.649529		-3.1	20
sec-Butylbenzene	A	25.000	25.980	6.314385	6.561824		3.9	20
tert-Butylbenzene	A	25.000	28.070	4.660614	5.232533		12.3	20
Carbon tetrachloride	A	25.000	26.260	0.449341	0.4720038		5.0	20
Chlorobenzene	A	25.000	24.330	3.316137	3.227299	0.3	-2.7	20
Chloroethane	A	25.000	22.810	0.5145747	0.4695283		-8.8	20
Chloroform	A	25.000	24.420	0.7571101	0.7395156		-2.3	20
Chloromethane	A	25.000	20.360	0.9407238	0.7660578	0.1	-18.6	20
2-Chlorotoluene	A	25.000	25.540	4.677137	4.77749		2.1	20
4-Chlorotoluene	A	25.000	25.280	4.223867	4.270703		1.1	20
Dibromochloromethane	A	25.000	26.990	0.1504286	0.1623829		7.9	20
1,2-Dibromo-3-chloropropane	A	25.000	22.790	7.330085E-02	6.681104E-02		-8.9	20
1,2-Dibromoethane	A	25.000	24.830	0.1293784	0.1285085		-0.7	20
Dibromomethane	A	25.000	25.690	9.576412E-02	9.841081E-02		2.8	20
1,2-Dichlorobenzene	A	25.000	25.340	2.15653	2.185652		1.4	20
1,3-Dichlorobenzene	A	25.000	26.250	2.49992	2.624774		5.0	20
1,4-Dichlorobenzene	A	25.000	25.790	2.443238	2.520134		3.1	20



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Project: Alameda
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CONTINUING CALIBRATION CHECK EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>30JUL33.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713392</u>	Injection Date:	<u>07/30/17</u>
Lab Sample ID:	<u>1713392-CCV4</u>	Injection Time:	<u>20:01</u>

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	29.670	0.4975939	0.5905978		18.7	20
1,1-Dichloroethane	A	25.000	23.940	1.070106	1.024804	0.1	-4.2	20
1,2-Dichloroethane	A	25.000	25.460	0.4067953	0.4142129		1.8	20
1,1-Dichloroethene	A	25.000	24.880	0.8069668	0.803053		-0.5	20
cis-1,2-Dichloroethene	A	25.000	22.450	0.5222008	0.4690227		-10.2	20
trans-1,2-Dichloroethene	A	25.000	23.460	0.5009588	0.4701035		-6.2	20
1,2-Dichloropropane	A	25.000	24.530	0.379403	0.3723026		-1.9	20
1,3-Dichloropropane	A	25.000	23.740	0.2528371	0.2401272		-5.0	20
2,2-Dichloropropane	A	25.000	22.190	0.602219	0.5345371		-11.2	20
1,1-Dichloropropene	A	25.000	23.770	0.6845791	0.6507659		-4.9	20
cis-1,3-Dichloropropene	A	25.000	25.380	0.3594295	0.3648289		1.5	20
trans-1,3-Dichloropropene	A	25.000	26.540	0.2346113	0.2490523		6.2	20
Ethylbenzene	A	25.000	24.750	1.948304	1.928803		-1.0	20
Hexachlorobutadiene	A	25.000	26.410	0.86466	0.9134299		5.6	20
Isopropylbenzene	A	25.000	25.810	5.700983	5.886015		3.2	20
p-Isopropyltoluene	A	25.000	25.910	5.149437	5.337819		3.7	20
Methylene chloride	A	25.000	22.500	0.4314876	0.3882722		-10.0	20
Methyl t-butyl ether	A	25.000	22.890	0.603852	0.552867		-8.4	20
Naphthalene	A	25.000	21.530	1.569043	1.351301		-13.9	20
n-Propylbenzene	A	25.000	24.150	7.403456	7.153009		-3.4	20
Styrene	A	25.000	25.640	3.356924	3.442898		2.6	20
1,1,1,2-Tetrachloroethane	A	25.000	27.170	0.8160317	0.8867714		8.7	20
1,1,2,2-Tetrachloroethane	A	25.000	22.810	0.5437402	0.4960317	0.3	-8.8	20



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Project: Alameda
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Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories
Client: AMEC Environmental & Infrastructure- \$AMCN
Instrument ID: MS-V5
Lab File ID: 30JUL33.D
Sequence: 1713392
Lab Sample ID: 1713392-CCV4
SDG: 17-20405
Project: Alameda
Calibration: 1707017
Calibration Date: 07/18/17 00:46
Injection Date: 07/30/17
Injection Time: 20:01

Table with 9 columns: COMPOUND, CAL TYPE, CONC. (ug/L) (STD, CCV), RESPONSE FACTOR (ICAL, CCV, MIN (#)), % DIFF / DRIFT (2) (CCV, LIMIT (#)). Rows include various compounds like Tetrachloroethene, Toluene, Trichlorobenzene, etc.

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Instrument ID: MS-V5

Calibration: 1707017

Lab File ID: 30JUL34.D

Calibration Date: 07/18/17 00:46

Sequence: 1713392

Injection Date: 07/30/17

Lab Sample ID: 1713392-CCV5

Injection Time: 20:24

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	321.20	4.120558E-02	4.136019E-02		0.4	20
Acetonitrile	A	160.00	163.94	1.962376E-02	2.010721E-02		2.5	20
Acrolein	A	200.00	243.88	1.822349E-02	2.222128E-02		21.9	20 *
Acrylonitrile	A	80.000	82.390	6.794017E-02	6.997053E-02		3.0	20
Allyl chloride	A	32.000	30.680	1.003175	0.9617267		-4.1	20
t-Amyl Methyl ether	A	16.000	14.860	0.6727663	0.6247583		-7.1	20
Benzyl chloride	L	32.000	24.580	0.5754497	0.5011503		-23.2	20 *
t-Butyl alcohol	A	800.00	818.58	0.0118311	1.210593E-02		2.3	20
Carbon disulfide	A	32.000	29.040	1.516116	1.375741		-9.3	20
Chloroprene	A	32.000	31.940	1.054363	1.052404		-0.2	20
trans-1,4-Dichloro-2-butene	A	80.000	74.840	0.1052838	9.849545E-02		-6.4	20
Diisopropyl ether	A	16.000	14.450	0.3736986	0.3374188		-9.7	20
1,4-Dioxane	A	2000.0	2100.5	9.091868E-04	9.548807E-04		5.0	20
Ethanol	A	4000.0	4330.4	1.803136E-03	1.952093E-03		8.3	20
Ethyl methacrylate	A	80.000	79.310	0.1707978	0.1693195		-0.9	20
Ethyl t-butyl ether	A	16.000	14.940	1.222825	1.141861		-6.6	20
2-Hexanone	A	320.00	325.98	7.579232E-02	7.720937E-02		1.9	20
Isobutanol	A	400.00	456.54	5.666875E-03	6.467912E-03		14.1	20
Methacrylonitrile	A	160.00	146.33	0.0669583	6.123941E-02		-8.5	20
Methyl ethyl ketone	A	160.00	153.70	7.316144E-02	7.028293E-02		-3.9	20
Methyl iodide	A	32.000	13.300	0.5894983	0.2449309		-58.5	20 *
Methyl isobutyl ketone	A	160.00	165.03	0.1118834	0.1154038		3.1	20
Methyl methacrylate	A	80.000	79.570	7.466178E-02	7.426206E-02		-0.5	20



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9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
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Project Manager: Kevin Olness

**CONTINUING CALIBRATION CHECK
EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>30JUL34.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713392</u>	Injection Date:	<u>07/30/17</u>
Lab Sample ID:	<u>1713392-CCV5</u>	Injection Time:	<u>20:24</u>

COMPOUND	⁽¹⁾ CAL	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Propionitrile	A	400.00	404.24	2.456186E-02	2.482215E-02		1.1	20
Vinyl acetate	A	160.00	119.60	0.5836509	0.4362921		-25.2	20 *

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1712752 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CAL1)			Lab File ID: 20JUL03.D		Analyzed: 07/20/17 08:32			
1,2-Dichloroethane-d4 (Surrogate)	10.000	101		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.6		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.8		10.35	10.34333	0.0067	+/-1.0	
Cal Standard (1712752-CAL2)			Lab File ID: 20JUL05.D		Analyzed: 07/20/17 09:18			
1,2-Dichloroethane-d4 (Surrogate)	10.000	101		6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.8		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL3)			Lab File ID: 20JUL06.D		Analyzed: 07/20/17 09:42			
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.6		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.9		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL4)			Lab File ID: 20JUL07.D		Analyzed: 07/20/17 10:05			
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.9		6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	101		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	103		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL5)			Lab File ID: 20JUL08.D		Analyzed: 07/20/17 10:28			
1,2-Dichloroethane-d4 (Surrogate)	10.000	94.0		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL6)			Lab File ID: 20JUL09.D		Analyzed: 07/20/17 10:51			
1,2-Dichloroethane-d4 (Surrogate)	10.000	92.4		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	102		10.35	10.34333	0.0067	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713390 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (1713390-ICV1)			Lab File ID: 20JUL12.D		Analyzed: 07/20/17 12:00			
1,2-Dichloroethane-d4 (Surrogate)	10.000	100	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.4	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	104	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Initial Cal Blank (1713390-ICB1)			Lab File ID: 20JUL14.D		Analyzed: 07/20/17 12:46			
1,2-Dichloroethane-d4 (Surrogate)	10.000	106	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.2	85 - 114	10.35	10.34333	0.0067	+/-1.0	
Calibration Check (1713390-CCV1)			Lab File ID: 28JUL63.D		Analyzed: 07/29/17 07:16			
1,2-Dichloroethane-d4 (Surrogate)	10.000	93.7	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	94.8	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Blank (1713390-CCB1)			Lab File ID: 28JUL65.D		Analyzed: 07/29/17 08:02			
1,2-Dichloroethane-d4 (Surrogate)	10.000	105	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.7	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	91.0	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Blank (B[G2492-BLK1])			Lab File ID: 29JUL01.D		Analyzed: 07/29/17 14:32			
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.9	85 - 114	10.35	10.34333	0.0067	+/-1.0	
27MW01_170725 (1720405-16)			Lab File ID: 29JUL02.D		Analyzed: 07/29/17 14:55			
1,2-Dichloroethane-d4 (Surrogate)	10.000	104	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.9	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.7	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
LCS (B[G2492-BS1])			Lab File ID: 29JUL03.D		Analyzed: 07/29/17 15:18			
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	100	85 - 114	10.34	10.34333	-0.0033	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Sequence: 1713390 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Matrix Spike (B G2492-MS1)			Lab File ID: 29JUL04.D		Analyzed: 07/29/17 15:41			
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.3	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.9	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Matrix Spike Dup (B G2492-MSD1)			Lab File ID: 29JUL05.D		Analyzed: 07/29/17 16:04			
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.0	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.9	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.4	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-17_170725 (1720405-15)			Lab File ID: 29JUL10.D		Analyzed: 07/29/17 17:59			
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.9	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Check (1713390-CCV3)			Lab File ID: 29JUL13.D		Analyzed: 07/29/17 19:08			
1,2-Dichloroethane-d4 (Surrogate)	10.000	96.2	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.0	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Blank (1713390-CCB2)			Lab File ID: 29JUL15.D		Analyzed: 07/29/17 19:54			
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.4	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.9	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.8	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-03_170725 (1720405-02)			Lab File ID: 29JUL16.D		Analyzed: 07/29/17 20:17			
1,2-Dichloroethane-d4 (Surrogate)	10.000	107	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-04_170725 (1720405-03)			Lab File ID: 29JUL17.D		Analyzed: 07/29/17 20:40			
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.5	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.8	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	92.5	85 - 114	10.34	10.34333	-0.0033	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713390</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
27EW-08_170725 (1720405-04)			Lab File ID: 29JUL18.D		Analyzed: 07/29/17 21:03			
1,2-Dichloroethane-d4 (Surrogate)	10.000	110	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.4	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-02_170725 (1720405-01)			Lab File ID: 29JUL19.D		Analyzed: 07/29/17 21:26			
1,2-Dichloroethane-d4 (Surrogate)	10.000	105	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.8	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	97.5	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-14_170725 (1720405-05)			Lab File ID: 29JUL20.D		Analyzed: 07/29/17 21:49			
1,2-Dichloroethane-d4 (Surrogate)	10.000	108	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.1	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-18_170725 (1720405-06)			Lab File ID: 29JUL21.D		Analyzed: 07/29/17 22:12			
1,2-Dichloroethane-d4 (Surrogate)	10.000	104	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.7	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	102	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
DUP07_170725 (1720405-10)			Lab File ID: 29JUL22.D		Analyzed: 07/29/17 22:35			
1,2-Dichloroethane-d4 (Surrogate)	10.000	100	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.2	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.9	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-13_170725 (1720405-13)			Lab File ID: 29JUL23.D		Analyzed: 07/29/17 22:58			
1,2-Dichloroethane-d4 (Surrogate)	10.000	108	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.8	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.4	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-16_170725 (1720405-14)			Lab File ID: 29JUL24.D		Analyzed: 07/29/17 23:21			
1,2-Dichloroethane-d4 (Surrogate)	10.000	106	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	94.7	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.5	85 - 114	10.34	10.34333	-0.0033	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713390 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
27MW14_170725 (1720405-17)			Lab File ID: 29JUL25.D		Analyzed: 07/29/17 23:44			
1,2-Dichloroethane-d4 (Surrogate)	10.000	101	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.1	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	93.8	85 - 114	10.35	10.34333	0.0067	+/-1.0	
DUP08_170725 (1720405-18)			Lab File ID: 29JUL26.D		Analyzed: 07/30/17 00:07			
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	95.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.8	85 - 114	10.35	10.34333	0.0067	+/-1.0	
EB24_170725 (1720405-19)			Lab File ID: 29JUL27.D		Analyzed: 07/30/17 00:30			
1,2-Dichloroethane-d4 (Surrogate)	10.000	106	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.8	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	92.7	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
EB25_170725 (1720405-20)			Lab File ID: 29JUL28.D		Analyzed: 07/30/17 00:53			
1,2-Dichloroethane-d4 (Surrogate)	10.000	105	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.4	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.7	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
EB26_170725 (1720405-21)			Lab File ID: 29JUL29.D		Analyzed: 07/30/17 01:16			
1,2-Dichloroethane-d4 (Surrogate)	10.000	104	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	92.1	85 - 114	10.35	10.34333	0.0067	+/-1.0	
TB15_170725 (1720405-22)			Lab File ID: 29JUL30.D		Analyzed: 07/30/17 01:39			
1,2-Dichloroethane-d4 (Surrogate)	10.000	105	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.1	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.3	85 - 114	10.35	10.34333	0.0067	+/-1.0	
Calibration Check (1713390-CCV5)			Lab File ID: 29JUL43.D		Analyzed: 07/30/17 06:36			
1,2-Dichloroethane-d4 (Surrogate)	10.000	101	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.8	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	94.3	85 - 114	10.34	10.34333	-0.0033	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**SURROGATE STANDARD RECOVERY AND RT SUMMARY
EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713390</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Blank (1713390-CCB3)			Lab File ID: 29JUL45.D		Analyzed: 07/30/17 07:22			
1,2-Dichloroethane-d4 (Surrogate)	10.000	103	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.0	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.3	85 - 114	10.34	10.34333	-0.0033	+/-1.0	



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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713392</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (1713392-ICV1)			Lab File ID: 20JUL12.D		Analyzed: 07/20/17 12:00			
1,2-Dichloroethane-d4 (Surrogate)	10.000	100	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.4	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	104	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Initial Cal Blank (1713392-ICB1)			Lab File ID: 20JUL14.D		Analyzed: 07/20/17 12:46			
1,2-Dichloroethane-d4 (Surrogate)	10.000	106	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.2	85 - 114	10.35	10.34333	0.0067	+/-1.0	
Calibration Check (1713392-CCV1)			Lab File ID: 30JUL02.D		Analyzed: 07/30/17 08:08			
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.0	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.9	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	104	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Blank (1713392-CCB1)			Lab File ID: 30JUL05.D		Analyzed: 07/30/17 09:17			
1,2-Dichloroethane-d4 (Surrogate)	10.000	96.6	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.8	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	94.1	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-17_170725 (1720405-15RE1)			Lab File ID: 30JUL27.D		Analyzed: 07/30/17 17:43			
1,2-Dichloroethane-d4 (Surrogate)	10.000	104	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	97.6	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Check (1713392-CCV4)			Lab File ID: 30JUL33.D		Analyzed: 07/30/17 20:01			
1,2-Dichloroethane-d4 (Surrogate)	10.000	100	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.4	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.2	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Blank (1713392-CCB2)			Lab File ID: 30JUL36.D		Analyzed: 07/30/17 21:10			
1,2-Dichloroethane-d4 (Surrogate)	10.000	97.5	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.3	85 - 114	10.34	10.34333	-0.0033	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1712752 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CALD)			Lab File ID: 17JUL50.D			Analyzed: 07/18/17 00:00			
Pentafluorobenzene (IS)	203330	6.57	187618	6.58	108	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALE)			Lab File ID: 17JUL51.D			Analyzed: 07/18/17 00:23			
Pentafluorobenzene (IS)	203353	6.57	187618	6.58	108	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALF)			Lab File ID: 17JUL52.D			Analyzed: 07/18/17 00:46			
Pentafluorobenzene (IS)	209806	6.57	187618	6.58	112	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALG)			Lab File ID: 17JUL53.D			Analyzed: 07/18/17 01:09			
Pentafluorobenzene (IS)	214428	6.57	187618	6.58	114	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALH)			Lab File ID: 17JUL54.D			Analyzed: 07/18/17 01:32			
Pentafluorobenzene (IS)	210761	6.57	187618	6.58	112	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALI)			Lab File ID: 17JUL55.D			Analyzed: 07/18/17 01:55			
Pentafluorobenzene (IS)	228564	6.57	187618	6.58	122	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CAL1)			Lab File ID: 20JUL03.D			Analyzed: 07/20/17 08:32			
Pentafluorobenzene (IS)	217011	6.57	187618	6.58	116	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	90897	9.61	72968	9.61	125	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	336200	7.38	281102	7.38	120	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL2)			Lab File ID: 20JUL05.D			Analyzed: 07/20/17 09:18			
Pentafluorobenzene (IS)	219386	6.58	187618	6.58	117	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	89283	9.61	72968	9.61	122	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	341653	7.38	281102	7.38	122	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL3)			Lab File ID: 20JUL06.D			Analyzed: 07/20/17 09:42			
Pentafluorobenzene (IS)	160100	6.58	187618	6.58	85	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	66101	9.62	72968	9.61	91	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	249503	7.38	281102	7.38	89	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL4)			Lab File ID: 20JUL07.D			Analyzed: 07/20/17 10:05			
Pentafluorobenzene (IS)	187618	6.58	187618	6.58	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	72968	9.61	72968	9.61	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	281102	7.38	281102	7.38	100	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1712752 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CAL5)			Lab File ID: 20JUL08.D			Analyzed: 07/20/17 10:28			
Pentafluorobenzene (IS)	185328	6.58	187618	6.58	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	75612	9.62	72968	9.61	104	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	283937	7.38	281102	7.38	101	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL6)			Lab File ID: 20JUL09.D			Analyzed: 07/20/17 10:51			
Pentafluorobenzene (IS)	190235	6.57	187618	6.58	101	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	79131	9.61	72968	9.61	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	291095	7.38	281102	7.38	104	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL7)			Lab File ID: 20JUL15.D			Analyzed: 07/20/17 13:09			
Pentafluorobenzene (IS)	185398	6.57	187618	6.58	99	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	74464	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	284772	7.38	281102	7.38	101	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL8)			Lab File ID: 20JUL17.D			Analyzed: 07/20/17 13:55			
Pentafluorobenzene (IS)	181609	6.57	187618	6.58	97	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	74489	9.61	72968	9.61	102	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	282158	7.38	281102	7.38	100	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL9)			Lab File ID: 20JUL18.D			Analyzed: 07/20/17 14:18			
Pentafluorobenzene (IS)	177625	6.58	187618	6.58	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	69283	9.62	72968	9.61	95	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	272450	7.38	281102	7.38	97	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CALA)			Lab File ID: 20JUL19.D			Analyzed: 07/20/17 14:41			
Pentafluorobenzene (IS)	178179	6.58	187618	6.58	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71971	9.61	72968	9.61	99	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	269523	7.38	281102	7.38	96	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CALB)			Lab File ID: 20JUL20.D			Analyzed: 07/20/17 15:04			
Pentafluorobenzene (IS)	174621	6.57	187618	6.58	93	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69099	9.62	72968	9.61	95	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	263233	7.38	281102	7.38	94	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
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 San Diego, CA 92123

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 Project: Alameda
 Project Number: 5023146096
 Project Manager: Kevin Olness

**INTERNAL STANDARD AREA AND RT SUMMARY
 EPA-8260B**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1712752</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CALC)		Lab File ID: 20JUL21.D			Analyzed: 07/20/17 15:27				
Pentafluorobenzene (IS)	191859	6.57	187618	6.58	102	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	76272	9.62	72968	9.61	105	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	287684	7.38	281102	7.38	102	50 - 200	0.0000	+/-0.50	



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**INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713390 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (1713390-ICV1)			Lab File ID: 20JUL12.D			Analyzed: 07/20/17 12:00			
Pentafluorobenzene (IS)	184644	6.58	187618	6.58	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	74559	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	285117	7.38	281102	7.38	101	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1713390-ICB1)			Lab File ID: 20JUL14.D			Analyzed: 07/20/17 12:46			
Pentafluorobenzene (IS)	181261	6.57	184644	6.58	98	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	73863	9.61	74559	9.62	99	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	281231	7.38	285117	7.38	99	50 - 200	0.0000	+/-0.50	
Initial Cal Check (1713390-ICV2)			Lab File ID: 20JUL24.D			Analyzed: 07/20/17 16:36			
Pentafluorobenzene (IS)	179876	6.58	187618	6.58	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	74706	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	278423	7.38	281102	7.38	99	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1713390-ICB2)			Lab File ID: 20JUL26.D			Analyzed: 07/20/17 17:22			
Pentafluorobenzene (IS)	171673	6.57	179876	6.58	95	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	71809	9.62	74706	9.62	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	268403	7.38	278423	7.38	96	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV1)			Lab File ID: 28JUL63.D			Analyzed: 07/29/17 07:16			
Pentafluorobenzene (IS)	167483	6.58	187618	6.58	89	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	62331	9.62	72968	9.61	85	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	235658	7.38	281102	7.38	84	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV2)			Lab File ID: 28JUL64.D			Analyzed: 07/29/17 07:39			
Pentafluorobenzene (IS)	162953	6.57	187618	6.58	87	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	64183	9.62	72968	9.61	88	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	237313	7.38	281102	7.38	84	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713390-CCB1)			Lab File ID: 28JUL65.D			Analyzed: 07/29/17 08:02			
Pentafluorobenzene (IS)	155536	6.57	162953	6.57	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	64189	9.61	64183	9.62	100	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	236490	7.38	237313	7.38	100	50 - 200	0.0000	+/-0.50	



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Project: Alameda
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Project Manager: Kevin Olness

**INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713390 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B[G2492-BLK1])			Lab File ID: 29JUL01.D			Analyzed: 07/29/17 14:32			
Pentafluorobenzene (IS)	178938	6.58	162953	6.57	110	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69768	9.61	64183	9.62	109	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	261493	7.38	237313	7.38	110	50 - 200	0.0000	+/-0.50	
27MW01_170725 (1720405-16)			Lab File ID: 29JUL02.D			Analyzed: 07/29/17 14:55			
Pentafluorobenzene (IS)	171437	6.58	162953	6.57	105	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	68812	9.61	64183	9.62	107	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	258263	7.38	237313	7.38	109	50 - 200	0.0000	+/-0.50	
LCS (B[G2492-BS1])			Lab File ID: 29JUL03.D			Analyzed: 07/29/17 15:18			
Pentafluorobenzene (IS)	180069	6.57	162953	6.57	111	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71879	9.62	64183	9.62	112	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	262924	7.38	237313	7.38	111	50 - 200	0.0000	+/-0.50	
Matrix Spike (B[G2492-MS1])			Lab File ID: 29JUL04.D			Analyzed: 07/29/17 15:41			
Pentafluorobenzene (IS)	184494	6.57	162953	6.57	113	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	72474	9.62	64183	9.62	113	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	272333	7.38	237313	7.38	115	50 - 200	0.0000	+/-0.50	
Matrix Spike Dup (B[G2492-MSD1])			Lab File ID: 29JUL05.D			Analyzed: 07/29/17 16:04			
Pentafluorobenzene (IS)	160305	6.58	162953	6.57	98	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	63881	9.61	64183	9.62	100	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	245137	7.38	237313	7.38	103	50 - 200	0.0000	+/-0.50	
27EW-17_170725 (1720405-15)			Lab File ID: 29JUL10.D			Analyzed: 07/29/17 17:59			
Pentafluorobenzene (IS)	179580	6.57	162953	6.57	110	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	69430	9.61	64183	9.62	108	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	259780	7.38	237313	7.38	109	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV3)			Lab File ID: 29JUL13.D			Analyzed: 07/29/17 19:08			
Pentafluorobenzene (IS)	180626	6.57	187618	6.58	96	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	72971	9.62	72968	9.61	100	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	263149	7.38	281102	7.38	94	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Sequence: 1713390 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (1713390-CCV4)			Lab File ID: 29JUL14.D			Analyzed: 07/29/17 19:31			
Pentafluorobenzene (IS)	158448	6.57	187618	6.58	84	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	62675	9.62	72968	9.61	86	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	236027	7.38	281102	7.38	84	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713390-CCB2)			Lab File ID: 29JUL15.D			Analyzed: 07/29/17 19:54			
Pentafluorobenzene (IS)	188729	6.57	158448	6.57	119	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71584	9.62	62675	9.62	114	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	271364	7.38	236027	7.38	115	50 - 200	0.0000	+/-0.50	
27EW-03_170725 (1720405-02)			Lab File ID: 29JUL16.D			Analyzed: 07/29/17 20:17			
Pentafluorobenzene (IS)	178590	6.57	158448	6.57	113	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71489	9.61	62675	9.62	114	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	273726	7.38	236027	7.38	116	50 - 200	0.0000	+/-0.50	
27EW-04_170725 (1720405-03)			Lab File ID: 29JUL17.D			Analyzed: 07/29/17 20:40			
Pentafluorobenzene (IS)	177436	6.57	158448	6.57	112	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	73062	9.62	62675	9.62	117	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	258068	7.38	236027	7.38	109	50 - 200	0.0000	+/-0.50	
27EW-08_170725 (1720405-04)			Lab File ID: 29JUL18.D			Analyzed: 07/29/17 21:03			
Pentafluorobenzene (IS)	172883	6.57	158448	6.57	109	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65879	9.61	62675	9.62	105	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	253223	7.38	236027	7.38	107	50 - 200	0.0000	+/-0.50	
27EW-02_170725 (1720405-01)			Lab File ID: 29JUL19.D			Analyzed: 07/29/17 21:26			
Pentafluorobenzene (IS)	172662	6.57	158448	6.57	109	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	68677	9.62	62675	9.62	110	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	252151	7.38	236027	7.38	107	50 - 200	0.0000	+/-0.50	
27EW-14_170725 (1720405-05)			Lab File ID: 29JUL20.D			Analyzed: 07/29/17 21:49			
Pentafluorobenzene (IS)	169069	6.58	158448	6.57	107	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	67984	9.62	62675	9.62	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	253732	7.38	236027	7.38	108	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Sequence: 1713390 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
27EW-18_170725 (1720405-06)			Lab File ID: 29JUL21.D			Analyzed: 07/29/17 22:12			
Pentafluorobenzene (IS)	175384	6.57	158448	6.57	111	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65650	9.61	62675	9.62	105	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	259277	7.38	236027	7.38	110	50 - 200	0.0000	+/-0.50	
DUP07_170725 (1720405-10)			Lab File ID: 29JUL22.D			Analyzed: 07/29/17 22:35			
Pentafluorobenzene (IS)	180098	6.57	158448	6.57	114	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	68034	9.62	62675	9.62	109	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	267208	7.38	236027	7.38	113	50 - 200	0.0000	+/-0.50	
27EW-13_170725 (1720405-13)			Lab File ID: 29JUL23.D			Analyzed: 07/29/17 22:58			
Pentafluorobenzene (IS)	173202	6.57	158448	6.57	109	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	67952	9.62	62675	9.62	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	252230	7.38	236027	7.38	107	50 - 200	0.0000	+/-0.50	
27EW-16_170725 (1720405-14)			Lab File ID: 29JUL24.D			Analyzed: 07/29/17 23:21			
Pentafluorobenzene (IS)	172209	6.57	158448	6.57	109	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	67555	9.62	62675	9.62	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	260506	7.38	236027	7.38	110	50 - 200	0.0000	+/-0.50	
27MW14_170725 (1720405-17)			Lab File ID: 29JUL25.D			Analyzed: 07/29/17 23:44			
Pentafluorobenzene (IS)	172400	6.57	158448	6.57	109	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	68091	9.61	62675	9.62	109	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	254000	7.38	236027	7.38	108	50 - 200	0.0000	+/-0.50	
DUP08_170725 (1720405-18)			Lab File ID: 29JUL26.D			Analyzed: 07/30/17 00:07			
Pentafluorobenzene (IS)	174139	6.57	158448	6.57	110	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	68275	9.61	62675	9.62	109	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	257556	7.38	236027	7.38	109	50 - 200	0.0000	+/-0.50	
EB24_170725 (1720405-19)			Lab File ID: 29JUL27.D			Analyzed: 07/30/17 00:30			
Pentafluorobenzene (IS)	170269	6.58	158448	6.57	107	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69241	9.61	62675	9.62	110	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	252756	7.38	236027	7.38	107	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
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Project: Alameda
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Project Manager: Kevin Olness

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- SAMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713390</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
EB25_170725 (1720405-20)		Lab File ID: 29JUL28.D			Analyzed: 07/30/17 00:53				
Pentafluorobenzene (IS)	173969	6.57	158448	6.57	110	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	67498	9.62	62675	9.62	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	254930	7.38	236027	7.38	108	50 - 200	0.0000	+/-0.50	
EB26_170725 (1720405-21)		Lab File ID: 29JUL29.D			Analyzed: 07/30/17 01:16				
Pentafluorobenzene (IS)	153800	6.58	158448	6.57	97	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	61598	9.61	62675	9.62	98	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	220535	7.38	236027	7.38	93	50 - 200	0.0000	+/-0.50	
TB15_170725 (1720405-22)		Lab File ID: 29JUL30.D			Analyzed: 07/30/17 01:39				
Pentafluorobenzene (IS)	173986	6.57	158448	6.57	110	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	66088	9.61	62675	9.62	105	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	252892	7.38	236027	7.38	107	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV5)		Lab File ID: 29JUL43.D			Analyzed: 07/30/17 06:36				
Pentafluorobenzene (IS)	149661	6.57	187618	6.58	80	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	59847	9.61	72968	9.61	82	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	220506	7.38	281102	7.38	78	50 - 200	0.0000	+/-0.50	
Calibration Check (1713390-CCV6)		Lab File ID: 29JUL44.D			Analyzed: 07/30/17 06:59				
Pentafluorobenzene (IS)	177980	6.57	187618	6.58	95	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	68974	9.62	72968	9.61	95	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	260201	7.38	281102	7.38	93	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713390-CCB3)		Lab File ID: 29JUL45.D			Analyzed: 07/30/17 07:22				
Pentafluorobenzene (IS)	172680	6.57	177980	6.57	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	67070	9.62	68974	9.62	97	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	253784	7.38	260201	7.38	98	50 - 200	0.0000	+/-0.50	



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Project: Alameda
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Project Manager: Kevin Olness

**INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713392 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (1713392-ICV1)			Lab File ID: 20JUL12.D			Analyzed: 07/20/17 12:00			
Pentafluorobenzene (IS)	184644	6.58	187618	6.58	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	74559	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	285117	7.38	281102	7.38	101	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1713392-ICB1)			Lab File ID: 20JUL14.D			Analyzed: 07/20/17 12:46			
Pentafluorobenzene (IS)	181261	6.57	184644	6.58	98	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	73863	9.61	74559	9.62	99	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	281231	7.38	285117	7.38	99	50 - 200	0.0000	+/-0.50	
Initial Cal Check (1713392-ICV2)			Lab File ID: 20JUL24.D			Analyzed: 07/20/17 16:36			
Pentafluorobenzene (IS)	179876	6.58	187618	6.58	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	74706	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	278423	7.38	281102	7.38	99	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1713392-ICB2)			Lab File ID: 20JUL26.D			Analyzed: 07/20/17 17:22			
Pentafluorobenzene (IS)	171673	6.57	179876	6.58	95	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	71809	9.62	74706	9.62	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	268403	7.38	278423	7.38	96	50 - 200	0.0000	+/-0.50	
Calibration Check (1713392-CCV1)			Lab File ID: 30JUL02.D			Analyzed: 07/30/17 08:08			
Pentafluorobenzene (IS)	167572	6.57	187618	6.58	89	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	61943	9.62	72968	9.61	85	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	248081	7.38	281102	7.38	88	50 - 200	0.0000	+/-0.50	
Calibration Check (1713392-CCV2)			Lab File ID: 30JUL03.D			Analyzed: 07/30/17 08:31			
Pentafluorobenzene (IS)	185319	6.58	187618	6.58	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	69677	9.61	72968	9.61	95	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	262555	7.38	281102	7.38	93	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713392-CCB1)			Lab File ID: 30JUL05.D			Analyzed: 07/30/17 09:17			
Pentafluorobenzene (IS)	188815	6.57	185319	6.58	102	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	73883	9.62	69677	9.61	106	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	271859	7.38	262555	7.38	104	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713392 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
27EW-17_170725 (1720405-15RE1)			Lab File ID: 30JUL27.D			Analyzed: 07/30/17 17:43			
Pentafluorobenzene (IS)	161482	6.57	185319	6.58	87	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	65937	9.61	69677	9.61	95	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	244352	7.38	262555	7.38	93	50 - 200	0.0000	+/-0.50	
Calibration Check (1713392-CCV4)			Lab File ID: 30JUL33.D			Analyzed: 07/30/17 20:01			
Pentafluorobenzene (IS)	166919	6.58	187618	6.58	89	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65570	9.61	72968	9.61	90	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	240311	7.38	281102	7.38	85	50 - 200	0.0000	+/-0.50	
Calibration Check (1713392-CCV5)			Lab File ID: 30JUL34.D			Analyzed: 07/30/17 20:24			
Pentafluorobenzene (IS)	170654	6.58	187618	6.58	91	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	68243	9.62	72968	9.61	94	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	246125	7.38	281102	7.38	88	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713392-CCB2)			Lab File ID: 30JUL36.D			Analyzed: 07/30/17 21:10			
Pentafluorobenzene (IS)	172972	6.57	170654	6.58	101	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	70031	9.62	68243	9.62	103	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	261190	7.38	246125	7.38	106	50 - 200	0.0000	+/-0.50	



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INITIAL CALIBRATION STANDARDS
EPA-8260B

Laboratory:	BC Laboratories	SDG:	17-20405
Client:	AMEC Environmental & Infrastructure- \$AMCN	Project:	Alameda
Sequence:	1712752	Instrument:	MS-V5
Calibration:	1707017		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
7F24002	8260 V5 BFB 50NG	1712752-TUN2	17JUL49.D	07/17/17 23:37
7G20063	8260 V5 1712752 TPPH IC1	1712752-CALD	17JUL50.D	07/18/17 00:00
7G20064	8260 V5 1712752 TPPH IC2	1712752-CALE	17JUL51.D	07/18/17 00:23
7G20065	8260 V5 1712752 TPPH IC3	1712752-CALF	17JUL52.D	07/18/17 00:46
7G20066	8260 V5 1712752 TPPH IC4	1712752-CALG	17JUL53.D	07/18/17 01:09
7G20067	8260 V5 1712752 TPPH IC5	1712752-CALH	17JUL54.D	07/18/17 01:32
7G20068	8260 V5 1712752 TPPH IC6	1712752-CALI	17JUL55.D	07/18/17 01:55
7F24002	8260 V5 BFB 50NG	1712752-TUN1	20JUL02.D	07/20/17 08:09
7G20044	8260 V5 1712752 IC1	1712752-CAL1	20JUL03.D	07/20/17 08:32
7G20045	8260 V5 1712752 IC2	1712752-CAL2	20JUL05.D	07/20/17 09:18
7G20046	8260 V5 1712752 IC3	1712752-CAL3	20JUL06.D	07/20/17 09:42
7G20047	8260 V5 1712752 IC4	1712752-CAL4	20JUL07.D	07/20/17 10:05
7G20048	8260 V5 1712752 IC5	1712752-CAL5	20JUL08.D	07/20/17 10:28
7G20049	8260 V5 1712752 IC6	1712752-CAL6	20JUL09.D	07/20/17 10:51
7G20056	8260 V5 1712752 XIC1	1712752-CAL7	20JUL15.D	07/20/17 13:09
7G20057	8260 V5 1712752 XIC2	1712752-CAL8	20JUL17.D	07/20/17 13:55
7G20058	8260 V5 1712752 XIC3	1712752-CAL9	20JUL18.D	07/20/17 14:18
7G20059	8260 V5 1712752 XIC4	1712752-CALA	20JUL19.D	07/20/17 14:41
7G20060	8260 V5 1712752 XIC5	1712752-CALB	20JUL20.D	07/20/17 15:04
7G20061	8260 V5 1712752 XIC6	1712752-CALC	20JUL21.D	07/20/17 15:27



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Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Table with 13 columns: Compound, Level 01 (ug/L, RF), Level 02 (ug/L, RF), Level 03 (ug/L, RF), Level 04 (ug/L, RF), Level 05 (ug/L, RF), Level 06 (ug/L, RF). Rows include Benzene, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromoform, Bromomethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, Dibromochloromethane, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane.



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INITIAL CALIBRATION DATA
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Table with 13 columns: Compound, Level 01 (ug/L, RF), Level 02 (ug/L, RF), Level 03 (ug/L, RF), Level 04 (ug/L, RF), Level 05 (ug/L, RF), Level 06 (ug/L, RF). Rows include various compounds like 1,2-Dichloroethane, 1,1-Dichloroethene, etc.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Table with 13 columns: Compound, Level 01 (ug/L, RF), Level 02 (ug/L, RF), Level 03 (ug/L, RF), Level 04 (ug/L, RF), Level 05 (ug/L, RF), Level 06 (ug/L, RF). Rows include various compounds like 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, etc.



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF										
Cyclohexanone												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorotrifluoroethane												
2,2-Dichloro-1,1,1-trifluoroethane												
Diethyl ether												
Diisopropyl ether												
1,4-Dioxane												
Ethanol												
Ethyl Amyl Ketone												
Ethyl methacrylate												
Ethyl t-butyl ether												
Hexachloroethane	0.5	0.5014467	1	0.4756785	10	0.6755117	25	0.7837627	50	0.8954399	100	0.9270817
Hexane												
2-Hexanone												
Isobutanol												
Isopropyl alcohol												
Methacrylonitrile												
Methyl acetate												
Methylcyclohexane												
Methyl ethyl ketone												
5-Methyl-3-heptanone												
Methyl iodide												
Methyl isobutyl ketone												
Methyl methacrylate												
Pentachloroethane												
Propionitrile												

AMEC Environmental & Infrastructure- 9210 Sky Park Court #200 San Diego, CA 92123	Reported: 8/25/2017 9:39:35AM Project: Alameda Project Number: 5023146096 Project Manager: Kevin Olness
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INITIAL CALIBRATION DATA
EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF										
Tetrahydrofuran												
Vinyl acetate												
p- & m-Xylenes	1	2.665545	2	2.484628	20	2.59251	50	2.358552	100	2.274933	200	1.923861
o-Xylene	0.5	2.188191	1	2.209155	10	2.419298	25	2.260531	50	2.171565	100	1.965659
Total Purgeable Petroleum Hydroc												
1,2-Dichloroethane-d4 (Surrogate)	10	0.3012474	10	0.3018151	10	0.2951343	10	0.2961709	10	0.2815387	10	0.2765317
Toluene-d8 (Surrogate)	10	1.220306	10	1.23463	10	1.223885	10	1.247597	10	1.242184	10	1.240574
4-Bromofluorobenzene (Surrogate)	10	1.433469	10	1.499199	10	1.502352	10	1.520913	10	1.496218	10	1.506919



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San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Benzene												
Bromobenzene												
Bromochloromethane												
Bromodichloromethane												
Bromoform												
Bromomethane												
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon tetrachloride												
Chlorobenzene												
Chloroethane												
Chloroform												
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Dibromochloromethane												
1,2-Dibromo-3-chloropropane												
1,2-Dibromoethane												
Dibromomethane												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												
1,1-Dichloroethane												



AMEC Environmental & Infrastructure-
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Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
Total 1,2-Dichloroethene												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
Total 1,3-Dichloropropene												
Ethylbenzene												
Hexachlorobutadiene												
Isopropylbenzene												
p-Isopropyltoluene												
Methylene chloride												
Methyl t-butyl ether												
Naphthalene												
n-Propylbenzene												
Styrene												
1,1,1,2-Tetrachloroethane												
1,1,1,2,2-Tetrachloroethane												
Tetrachloroethene												
Toluene												



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INITIAL CALIBRATION DATA (Continued)
EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Table with 13 columns: Compound, Level 07 (ug/L, RF), Level 08 (ug/L, RF), Level 09 (ug/L, RF), Level 10 (ug/L, RF), Level 11 (ug/L, RF), Level 12 (ug/L, RF). Rows include various compounds like 1,2,3-Trichlorobenzene, Acetone, Acetonitrile, etc.



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Table with 13 columns: Compound, Level 07 (ug/L, RF), Level 08 (ug/L, RF), Level 09 (ug/L, RF), Level 10 (ug/L, RF), Level 11 (ug/L, RF), Level 12 (ug/L, RF). Rows include Chlorotrifluoroethene, Cyclohexane, Cyclohexanone, trans-1,4-Dichloro-2-butene, 1,2-Dichlorotrifluoroethane, 2,2-Dichloro-1,1,1-trifluoroethane, Diethyl ether, Diisopropyl ether, 1,4-Dioxane, Ethanol, Ethyl Amyl Ketone, Ethyl methacrylate, Ethyl t-butyl ether, Hexachloroethane, Hexane, 2-Hexanone, Isobutanol, Isopropyl alcohol, Methacrylonitrile, Methyl acetate, Methylcyclohexane, Methyl ethyl ketone, 5-Methyl-3-heptanone, Methyl iodide, Methyl isobutyl ketone.



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Methyl methacrylate	4	8.296988E-02	16	7.179267E-02	40	7.090842E-02	80	7.345802E-02	120	0.0766102	200	7.223151E-02
Pentachloroethane	0.8	0.4131191	3.2	0.3821454	8	0.3937293	16	0.3502018	24	0.4275086	40	0.4334585
Propionitrile	20	2.373542E-02	80	2.597889E-02	200	2.474398E-02	400	2.572553E-02	640	2.474225E-02	1000	2.244508E-02
Tetrahydrofuran	16	5.489204E-02	64	5.170965E-02	160	0.0475095	320	0.0481561	480	4.794157E-02	800	4.440709E-02
Vinyl acetate	8	0.691573	32	0.6018218	80	0.5827319	160	0.5569901	240	0.5691374	400	0.499651
p- & m-Xylenes												
o-Xylene												
Total Purgeable Petroleum Hydroc												
1,2-Dichloroethane-d4 (Surrogate)												
Toluene-d8 (Surrogate)												
4-Bromofluorobenzene (Surrogate)												



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Benzene												
Bromobenzene												
Bromochloromethane												
Bromodichloromethane												
Bromoform												
Bromomethane												
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon tetrachloride												
Chlorobenzene												
Chloroethane												
Chloroform												
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Dibromochloromethane												
1,2-Dibromo-3-chloropropane												
1,2-Dibromoethane												
Dibromomethane												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
1,1-Dichloroethane												
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
Total 1,2-Dichloroethene												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
Total 1,3-Dichloropropene												
Ethylbenzene												
Hexachlorobutadiene												
Isopropylbenzene												
p-Isopropyltoluene												
Methylene chloride												
Methyl t-butyl ether												
Naphthalene												
n-Propylbenzene												
Styrene												
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Toluene												
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoroethane												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												
Vinyl chloride												
Total Xylenes												
Total Trihalomethanes												
Acetone												
Acetonitrile												
Acrolein												
Acrylonitrile												
Allyl chloride												
t-Amyl Alcohol												
t-Amyl Methyl ether												
Benzyl chloride												
t-Butyl alcohol												
Carbon disulfide												
2-Chloroethyl vinyl ether												



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

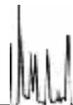
Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Chloroprene												
Chlorotrifluoroethene												
Cyclohexane												
Cyclohexanone												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorotrifluoroethane												
2,2-Dichloro-1,1,1-trifluoroethane												
Diethyl ether												
Diisopropyl ether												
1,4-Dioxane												
Ethanol												
Ethyl Amyl Ketone												
Ethyl methacrylate												
Ethyl t-butyl ether												
Hexachloroethane												
Hexane												
2-Hexanone												
Isobutanol												
Isopropyl alcohol												
Methacrylonitrile												
Methyl acetate												
Methylcyclohexane												
Methyl ethyl ketone												
5-Methyl-3-heptanone												
Methyl iodide												



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Methyl isobutyl ketone												
Methyl methacrylate												
Pentachloroethane												
Propionitrile												
Tetrahydrofuran												
Vinyl acetate												
p- & m-Xylenes												
o-Xylene												
Total Purgeable Petroleum Hydroc	50	3.26912	500	3.855426	1000	3.833188	1500	3.697965	2000	3.767286	2500	3.469848
1,2-Dichloroethane-d4 (Surrogate)												
Toluene-d8 (Surrogate)												
4-Bromofluorobenzene (Surrogate)												



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INITIAL CALIBRATION DATA (Continued)
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Benzene	2.047739	7.975319	6.936667	7.509294E-02			15	
Bromobenzene	1.167814	3.645673	10.44	2.779896E-03			15	
Bromochloromethane	0.1664346	4.747927	6.175	8.897551E-02			15	
Bromodichloromethane	0.2878825	4.896981	8.051667	0.0545546			15	
Bromoform	0.245463	14.7808	10.15333	4.894263E-02			SPCC (0.10)	
Bromomethane	0.406522	3.057725	2.436667	0.2126912			15	
n-Butylbenzene	4.798501	10.32777	11.19667	4.432301E-02			15	
sec-Butylbenzene	6.314385	13.16495	10.89	1.492901E-02			15	
tert-Butylbenzene	4.660614	6.172505	10.76167	3.643903E-02			15	
Carbon tetrachloride	0.449341	7.868999	6.71	1.409485E-02			15	
Chlorobenzene	3.316137	8.703972	9.636667	5.028739E-02			SPCC (0.30)	
Chloroethane	0.5145747	8.175335	2.566667	0.2020673			15	
Chloroform	0.7571101	5.641054	6.323333	8.020835E-02			CCC (20)	
Chloromethane	0.9407238	11.41846	1.948333	0.209787			SPCC (0.10)	
2-Chlorotoluene	4.677137	9.281955	10.54	8.602669E-03			15	
4-Chlorotoluene	4.223867	9.200021	10.61	1.653803E-02			15	
Dibromochloromethane	0.1504286	13.17659	9.235	5.969866E-02			15	
1,2-Dibromo-3-chloropropane	7.330085E-02	8.155469	11.664	4.802395E-02			15	
1,2-Dibromoethane	0.1293784	7.339435	9.32	1.632331E-02			15	
Dibromomethane	9.576412E-02	5.552506	7.905	6.711508E-02			15	
1,2-Dichlorobenzene	2.15653	3.913674	11.23833	3.489351E-02			15	
1,3-Dichlorobenzene	2.49992	6.777549	10.97833	3.290541E-02			15	
1,4-Dichlorobenzene	2.443238	3.991734	11.03	1.470375E-02			15	
Dichlorodifluoromethane	0.4975939	12.26991	1.76	8.063699E-03			15	
1,1-Dichloroethane	1.070106	5.014371	5.05	1.556668E-02			SPCC (0.10)	
1,2-Dichloroethane	0.4067953	6.904985	6.998333	5.804784E-02			15	



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Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1-Dichloroethene	0.8069668	5.313301	3.515	0.1557692			CCC (20)	
cis-1,2-Dichloroethene	0.5222008	5.332765	5.821667	7.057926E-02			15	
trans-1,2-Dichloroethene	0.5009588	4.773832	4.501667	0.0902417			15	
Total 1,2-Dichloroethene	0.5115798	4.674194	5.821667	7.057926E-02			15	
1,2-Dichloropropane	0.379403	2.403017	7.831667	0.0524673			CCC (20)	
1,3-Dichloropropane	0.2528371	3.287487	9.078333	4.054708E-02			15	
2,2-Dichloropropane	0.602219	4.985956	5.83	6.523725E-03			15	
1,1-Dichloropropene	0.6845791	5.607404	6.72	9.471379E-02			15	
cis-1,3-Dichloropropene	0.3594295	6.186595	8.398333	4.271731E-02			15	
trans-1,3-Dichloropropene	0.2346113	13.31409	8.82	1.724867E-02			15	
Total 1,3-Dichloropropene	0.2970204	8.91472	8.82	1.724867E-02			15	
Ethylbenzene	1.948304	6.711166	9.69	2.086988E-02			CCC (20)	
Hexachlorobutadiene	0.86466	6.731708	12.17167	3.249952E-02			15	
Isopropylbenzene	5.700983	12.01191	10.23	0.0167001			15	
p-Isopropyltoluene	5.149437	12.94217	10.97	1.272075E-02			15	
Methylene chloride	0.4314876	7.008245	4.15	2.617728E-02			15	
Methyl t-butyl ether	0.603852	3.358593	4.483333	0.1145828			15	
Naphthalene	1.569043	10.53489	12.26	1.714861E-02			15	
n-Propylbenzene	7.403456	7.766669	10.476	5.149431E-02			15	
Styrene	3.356924	7.155197	10.02	0.0198293			15	
1,1,1,2-Tetrachloroethane	0.8160317	7.468304	9.69	2.086988E-02			15	
1,1,2,2-Tetrachloroethane	0.5437402	4.378707	10.40833	0.0365974			SPCC (0.30)	
Tetrachloroethene	0.3290699	4.314963	9.03	1.545367E-02			15	
Toluene	0.8662846	6.097255	8.65	1.331998E-02			CCC (20)	
1,2,3-Trichlorobenzene	1.048181	3.389568	12.38	1.070383E-02			15	
1,2,4-Trichlorobenzene	1.248966	2.496908	12.11	2.449746E-02			15	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,1-Trichloroethane	0.6553918	3.673248	6.526667	7.946589E-02			15	
1,1,2-Trichloroethane	0.1556498	6.06719	8.963333	5.878091E-02			15	
Trichloroethene	0.3434012	3.079274	7.601667	5.324327E-02			15	
Trichlorofluoromethane	0.6158835	5.608974	2.866667	0.1807154			15	
1,2,3-Trichloropropane	0.1156016	12.14427	10.45	1.965805E-02			15	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4228091	8.712896	3.531667	0.1142314			15	
1,2,4-Trimethylbenzene	4.672745	10.02384	10.79167	4.231581E-02			15	
1,3,5-Trimethylbenzene	4.717828	10.09625	10.57167	3.709394E-02			15	
Vinyl chloride	0.7494116	5.322207	2.07	5.801038E-03			CCC (20)	
Total Xylenes	2.323025	9.403007	10.01	9.924553E-03			15	
Total Trihalomethanes	7387.704	10.38989	10.15333	4.894263E-02			15	
Acetone	4.120558E-02	7.355169	3.554	0.1542441			15	
Acetonitrile	1.962376E-02	6.640588	3.908	0.1133817			15	
Acrolein	1.822349E-02	7.107257	3.39	2.140274E-03			15	
Acrylonitrile	6.794017E-02	3.939644	4.435	0.1236041			15	
Allyl chloride	1.003175	4.726935	3.98	1.761732E-02			15	
t-Amyl Alcohol	9.589422E-03	8.589473	6.96	9.150358E-02			15	
t-Amyl Methyl ether	0.6727663	5.977467	7.081667	5.899898E-02			15	
Benzyl chloride	0.5754497	21.75697	11.09	1.526915E-02	0.99878		0.99	
t-Butyl alcohol	0.0118311	3.22277	4.273333	0.2423085			15	
Carbon disulfide	1.516116	5.400329	3.79	0.013191			15	
2-Chloroethyl vinyl ether	9.798764E-02	4.768539	8.275	6.513453E-02			15	
Chloroprene	1.054363	4.56629	5.141667	8.153481E-02			15	
Chlorotrifluoroethene							15	
Cyclohexane	1.308731	7.841383	6.611667	5.923215E-02			15	
Cyclohexanone	6.618331E-02	6.533008	10.29167	4.271745E-02			15	



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Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
trans-1,4-Dichloro-2-butene	0.1052838	14.34315	10.426	5.090708E-02			15	
1,2-Dichlorotrifluoroethane	0.6588754	4.230009	3.296667	0.1557001			15	
2,2-Dichloro-1,1,1-trifluoroethane	0.9482424	4.689324	3.386667	0.1519809			15	
Diethyl ether	0.2500657	8.290032	3.22	2.123135E-02			15	
Diisopropyl ether	0.3736986	7.025495	5.096667	0.1006095			15	
1,4-Dioxane	9.091868E-04	6.11724	7.891667	5.151265E-02			15	
Ethanol	1.803136E-03	5.606357	3.081667	0.5201438			15	
Ethyl Amyl Ketone	0.3958186	7.879599	10.75167	3.756474E-02			15	
Ethyl methacrylate	0.1707978	5.312147	8.848334	4.928121E-02			15	
Ethyl t-butyl ether	1.222825	6.328552	5.583333	9.166626E-02			15	
Hexachloroethane	0.7098202	27.21178	11.4	3.753579E-03	0.99925		0.99	
Hexane	0.6427995	11.57174	4.855	0.1138465			15	
2-Hexanone	7.579232E-02	10.17669	9.091667	4.757151E-02			15	
Isobutanol	5.666875E-03	11.0932	6.84	9.249917E-02			15	
Isopropyl alcohol	8.311588E-03	9.768502	3.746667	0.3235285			15	
Methacrylonitrile	0.0669583	9.006243	6.12	1.277828E-02			15	
Methyl acetate	0.1240965	4.884847	3.965	0.1388816			15	
Methylcyclohexane	0.6111907	7.704348	7.806667	6.510089E-02			15	
Methyl ethyl ketone	7.316144E-02	7.850683	5.796667	9.151477E-02			15	
5-Methyl-3-heptanone	0.4580468	8.020127	10.43167	3.686923E-02			15	
Methyl iodide	0.5894983	7.903214	3.7	1.260276E-02			15	
Methyl isobutyl ketone	0.1118834	8.407287	8.5	0			15	
Methyl methacrylate	7.466178E-02	6.064135	7.871667	5.057399E-02			15	
Pentachloroethane	0.4000271	7.814724	10.79333	5.134563E-02			15	
Propionitrile	2.456186E-02	5.336931	5.881667	0.0697539			15	
Tetrahydrofuran	4.910266E-02	7.462978	6.186667	8.404824E-02			15	



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Project: Alameda
Project Number: 5023146096
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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Calibration: 1707017

Instrument: MS-V5

Matrix: Water

Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Vinyl acetate	0.5836509	10.82416	5.053333	0.1030703			15	
p- & m-Xylenes	2.383338	11.21367	9.77	1.748639E-02			15	
o-Xylene	2.2024	6.662899	10.01	9.924553E-03			15	
Total Purgeable Petroleum Hydrocarbons	3.648805	6.360727	9.568334	4.958059			15	
1,2-Dichloroethane-d4 (Surrogate)	0.292073	3.616111	6.916667	7.506552E-02			15	
Toluene-d8 (Surrogate)	1.234863	0.8727884	8.6	4.975675E-03			15	
4-Bromofluorobenzene (Surrogate)	1.493178	2.042971	10.34333	4.926945E-02			15	



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Reported: 8/25/2017 9:39:35AM
Project: Alameda
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Project Manager: Kevin Olness

HOLDING TIME SUMMARY
EPA-8260B

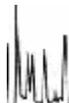
Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
27EW-02_170725	07/25/17 09:40	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 21:26	4.00	14.00	
27EW-03_170725	07/25/17 10:35	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 20:17	4.00	14.00	
27EW-04_170725	07/25/17 11:10	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 20:40	4.00	14.00	
27EW-08_170725	07/25/17 11:15	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 21:03	4.00	14.00	
27EW-14_170725	07/25/17 11:40	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 21:49	4.00	14.00	
27EW-18_170725	07/25/17 09:35	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 22:12	4.00	14.00	
DUP07_170725	07/25/17 11:15	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 22:35	4.00	14.00	
27EW-13_170725	07/25/17 12:50	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 22:58	4.00	14.00	
27EW-16_170725	07/25/17 11:50	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 23:21	4.00	14.00	
27EW-17_170725	07/25/17 12:35	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 17:59	4.00	14.00	
27EW-17_170725	07/25/17 12:35	07/25/17 22:20	07/29/17 07:00	5.00	14.00	07/30/17 17:43	5.00	14.00	
27MW01_170725	07/25/17 12:05	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 14:55	4.00	14.00	
27MW14_170725	07/25/17 12:55	07/25/17 22:20	07/29/17 07:00	4.00	14.00	07/29/17 23:44	4.00	14.00	
DUP08_170725	07/25/17 12:00	07/25/17 22:20	07/29/17 07:00	5.00	14.00	07/30/17 00:07	5.00	14.00	
EB24_170725	07/25/17 14:05	07/25/17 22:20	07/29/17 07:00	5.00	14.00	07/30/17 00:30	5.00	14.00	
EB25_170725	07/25/17 14:10	07/25/17 22:20	07/29/17 07:00	5.00	14.00	07/30/17 00:53	5.00	14.00	
EB26_170725	07/25/17 14:15	07/25/17 22:20	07/29/17 07:00	5.00	14.00	07/30/17 01:16	5.00	14.00	
TB15_170725	07/25/17 14:00	07/25/17 22:20	07/29/17 07:00	5.00	14.00	07/30/17 01:39	5.00	14.00	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument MS-V5



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Samples

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL19.D
 Acq On : 29 Jul 2017 9:26 pm
 Sample : 1720405-01
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:32 2017

Vial: 19
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172662	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	252151	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	68677	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	53140	10.54	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	105.40%
31) Toluene d8 SMC#2	8.60	98	307770	9.88	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.80%
49) Bromofluorobenzene SMC#3	10.34	95	99945	9.75	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.50%

Target Compounds

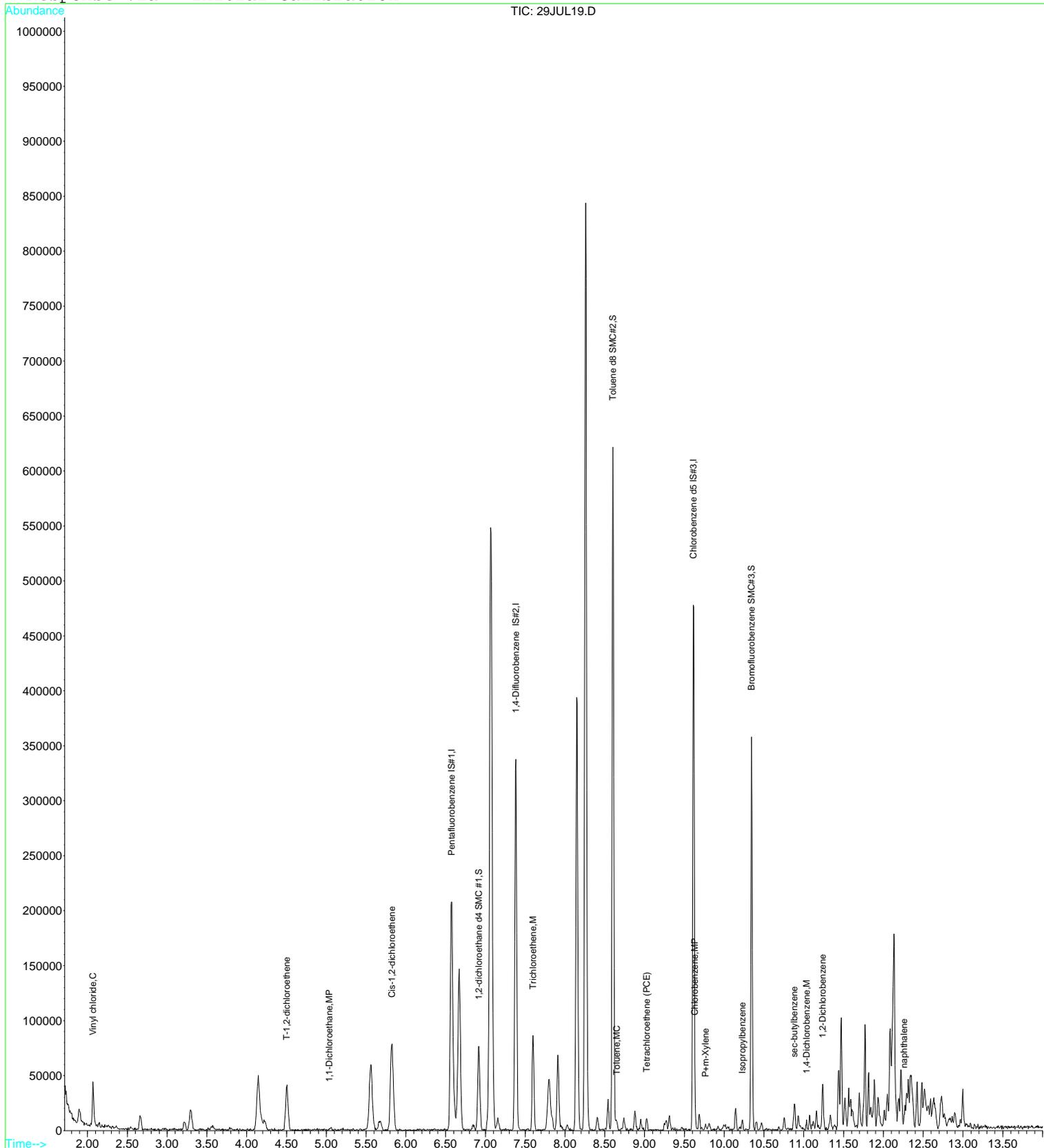
	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	33934	2.62	ug/L	79
12) T-1,2-dichloroethene	4.50	96	7974	0.92	ug/L	86
13) 1,1-Dichloroethane	5.04	63	2851	0.15	ug/L #	54
15) Cis-1,2-dichloroethene	5.82	96	40464	4.49	ug/L	86
25) Trichloroethene	7.60	130	25161	2.91	ug/L	86
32) Toluene	8.65	92	1846	0.08	ug/L	99
35) Tetrachloroethene (PCE)	9.03	166	2679	0.32	ug/L	91
40) Chlorobenzene	9.64	112	5359	0.24	ug/L	87
43) P+m-Xylene	9.77	106	1388	0.08	ug/L #	87
47) Isopropylbenzene	10.23	105	5312	0.14	ug/L	99
58) sec-butylbenzene	10.89	105	12335	0.28	ug/L #	86
61) 1,4-Dichlorobenzene	11.04	146	1769	0.11	ug/L #	70
63) 1,2-Dichlorobenzene	11.24	146	6510	0.44	ug/L #	87
68) naphthalene	12.26	128	1608	0.15	ug/L	100

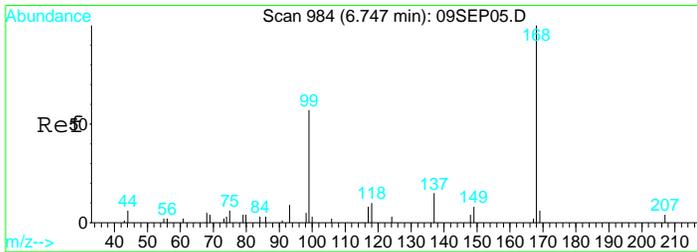
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Acq On : 29 Jul 2017 9:26 pm
Sample : 1720405-01
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:32 2017

Vial: 19
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

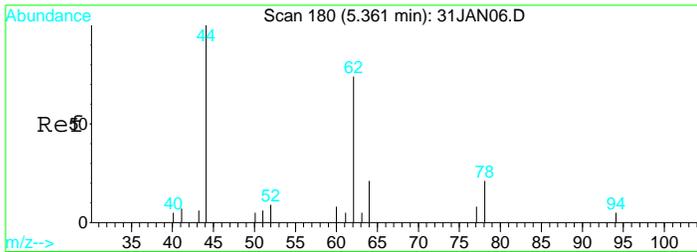
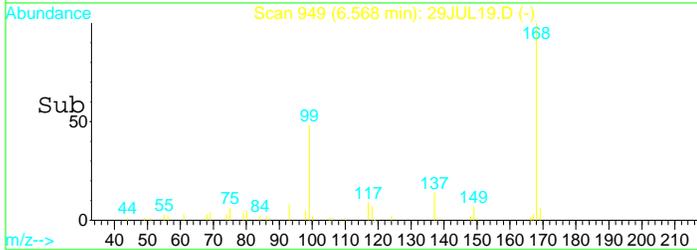
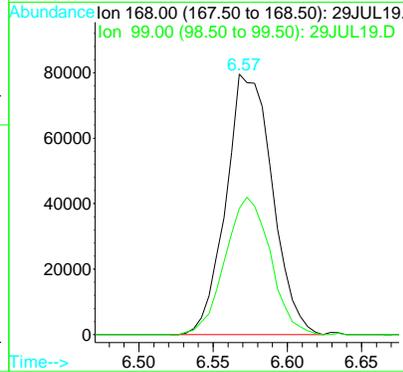
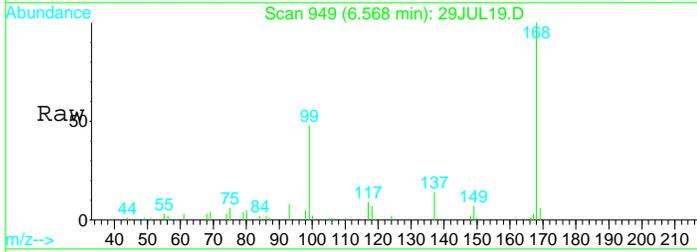
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





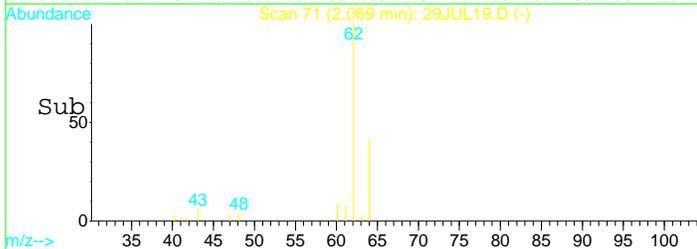
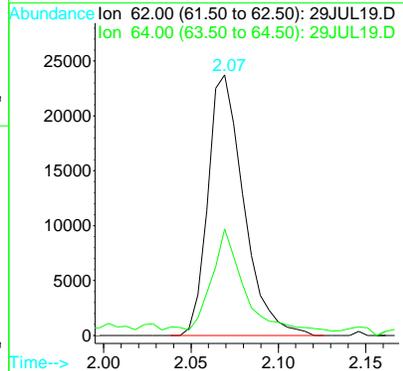
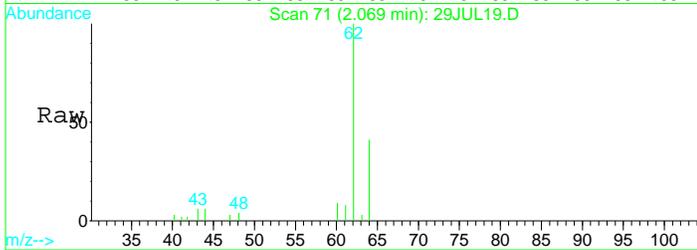
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 949
 Delta R.T. -0.01 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

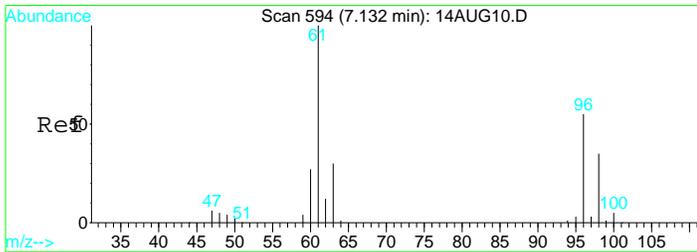
Tgt Ion: 168 Resp: 172662
 Ion Ratio Lower Upper
 168 100
 99 51.4 38.7 71.9



#4
 Vinyl chloride
 Concen: 2.62 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

Tgt Ion: 62 Resp: 33934
 Ion Ratio Lower Upper
 62 100
 64 40.5 39.3 72.9

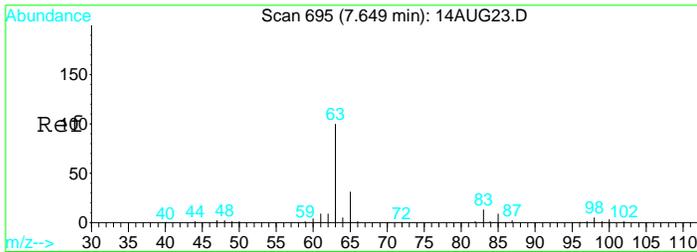
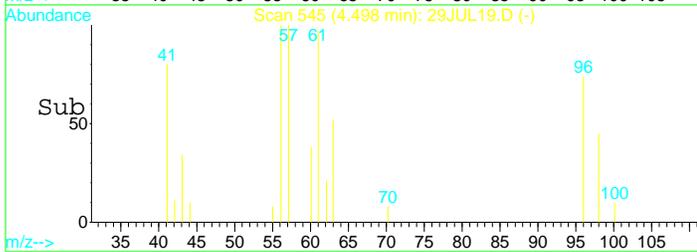
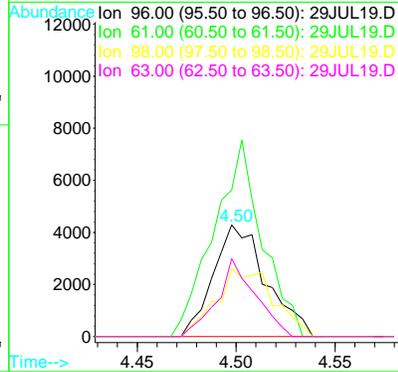
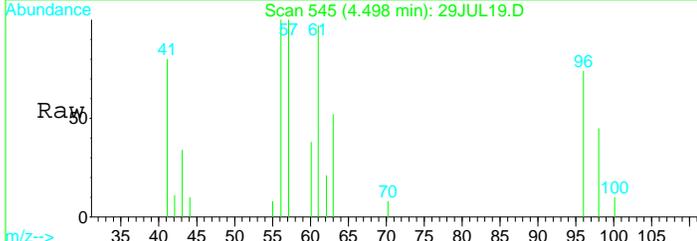




#12
 T-1,2-dichloroethene
 Concen: 0.92 ug/L
 RT: 4.50 min Scan# 545
 Delta R.T. -0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

Tgt Ion: 96 Resp: 7974

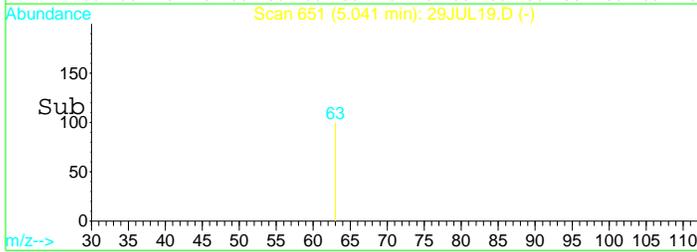
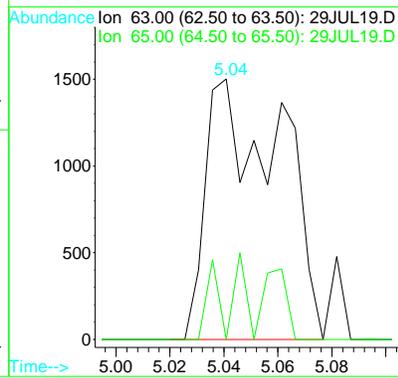
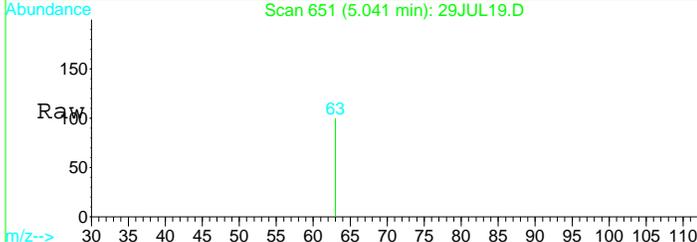
Ion	Ratio	Lower	Upper
96	100		
61	160.1	129.4	240.4
98	65.9	41.5	77.1
63	50.5	39.3	73.1

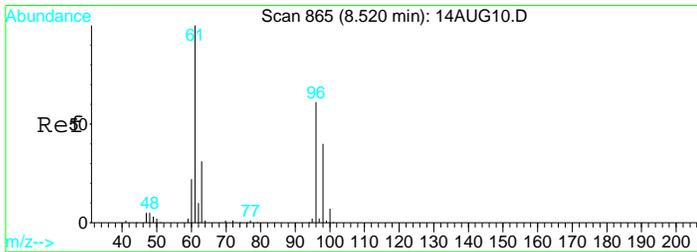


#13
 1,1-Dichloroethane
 Concen: 0.15 ug/L
 RT: 5.04 min Scan# 651
 Delta R.T. -0.01 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

Tgt Ion: 63 Resp: 2851

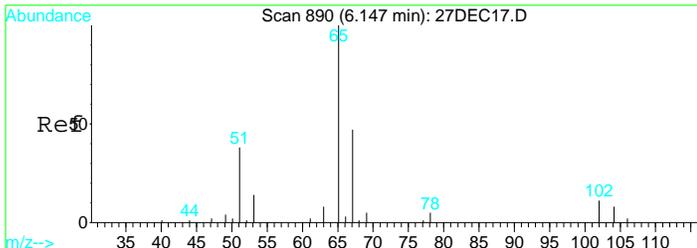
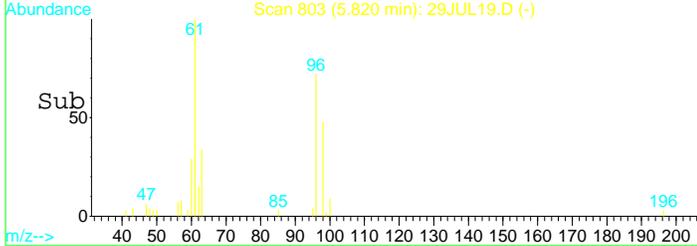
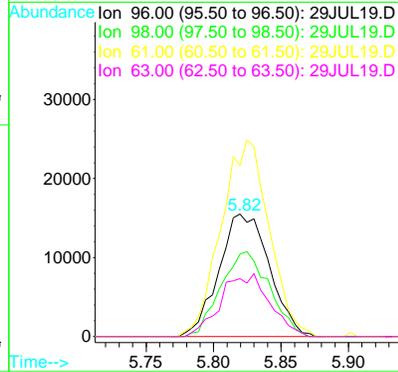
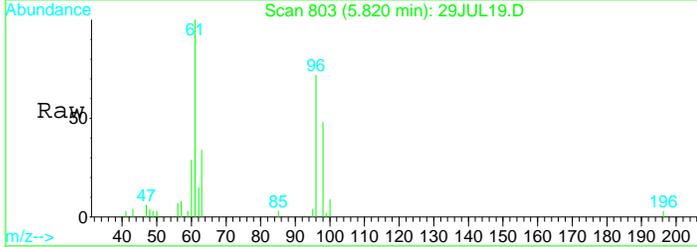
Ion	Ratio	Lower	Upper
63	100		
65	5.0	20.8	38.6#





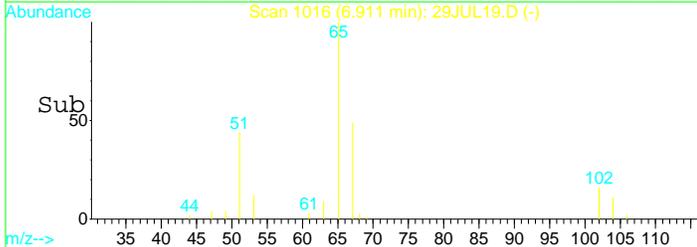
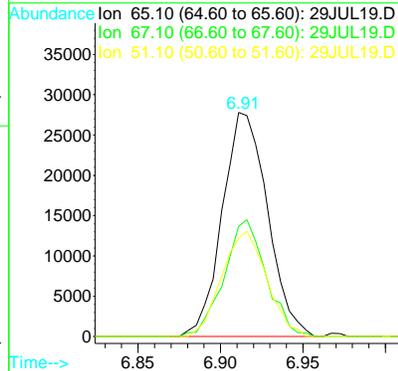
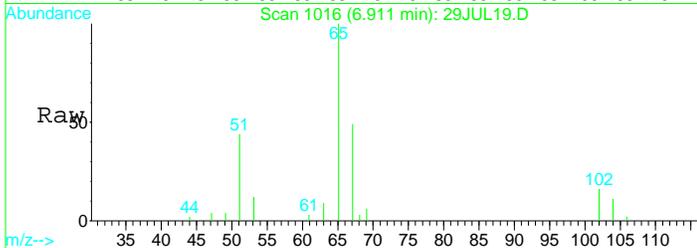
#15
 Cis-1,2-dichloroethene
 Concen: 4.49 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

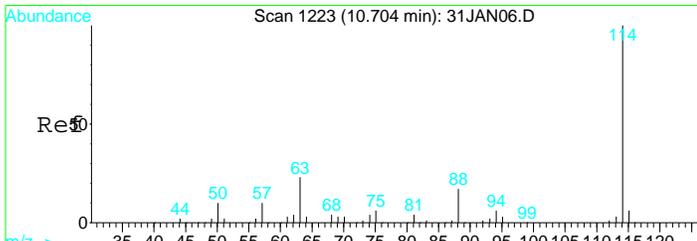
Tgt Ion	Resp	Lower	Upper
96	100		
98	66.6	51.9	96.3
61	152.0	122.8	228.0
63	49.2	42.1	78.3



#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

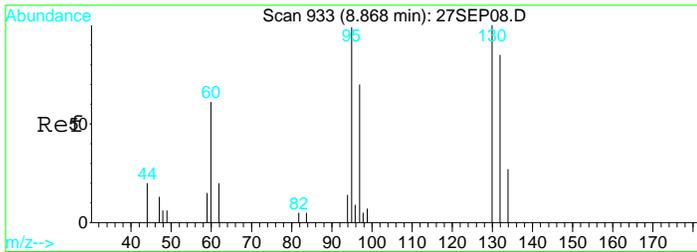
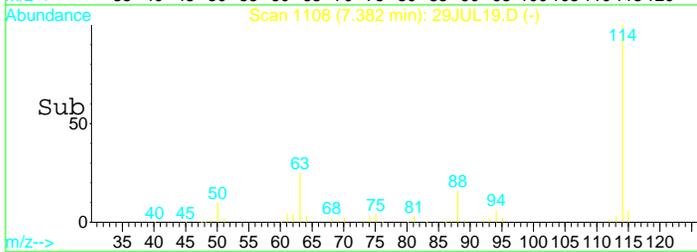
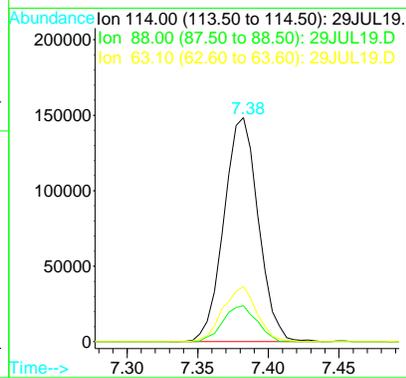
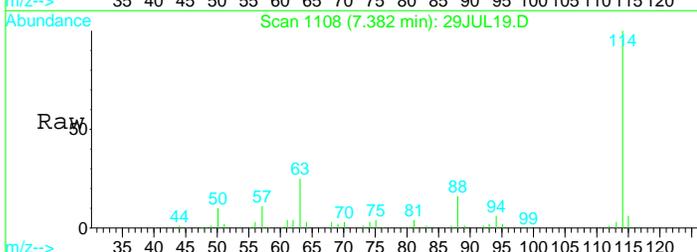
Tgt Ion	Resp	Lower	Upper
65	100		
67	48.2	36.2	67.2
51	46.5	42.0	78.0





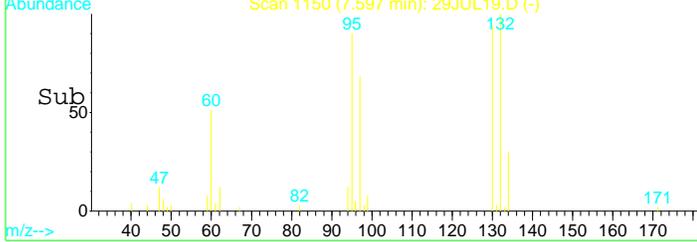
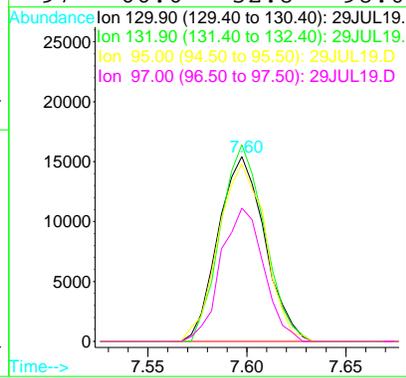
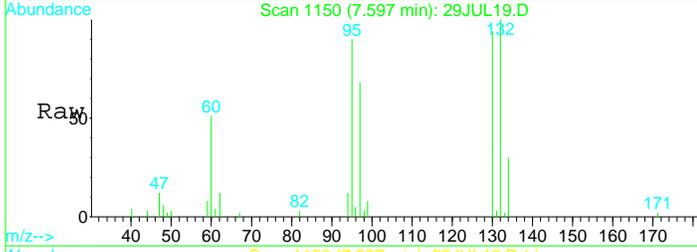
#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

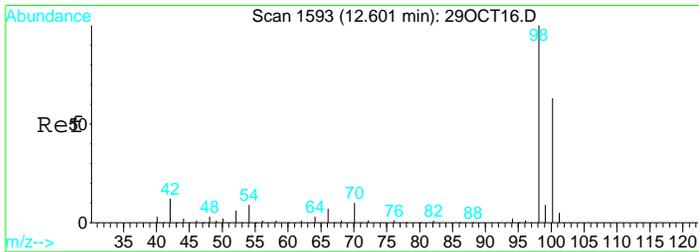
Tgt Ion	Resp	Lower	Upper
114	100		
88	15.9	11.7	21.7
63	24.2	16.7	30.9



#25
 Trichloroethene
 Concen: 2.91 ug/L
 RT: 7.60 min Scan# 1150
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

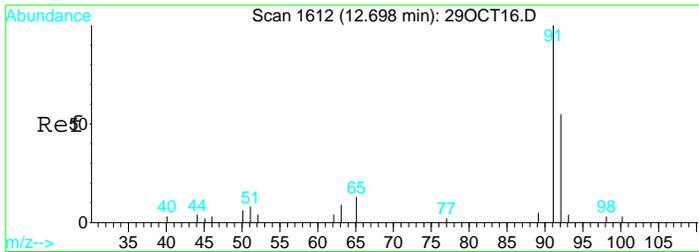
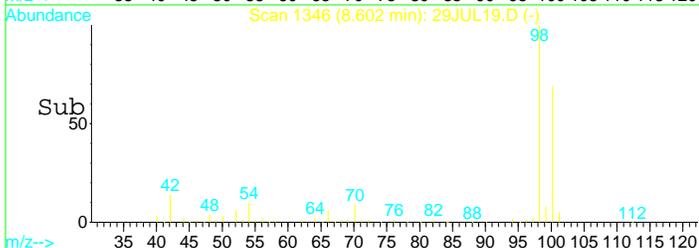
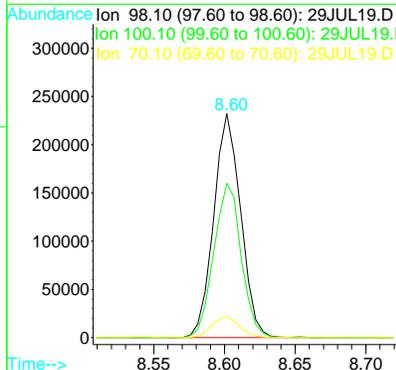
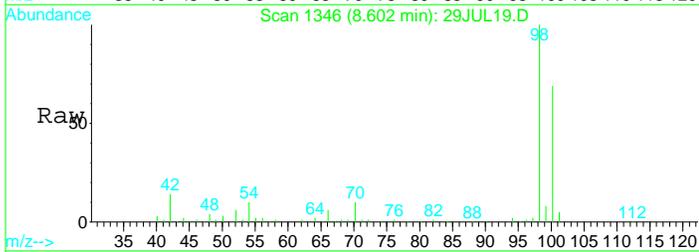
Tgt Ion	Resp	Lower	Upper
130	100		
132	101.1	66.1	122.7
95	97.4	86.1	159.9
97	66.6	52.8	98.0





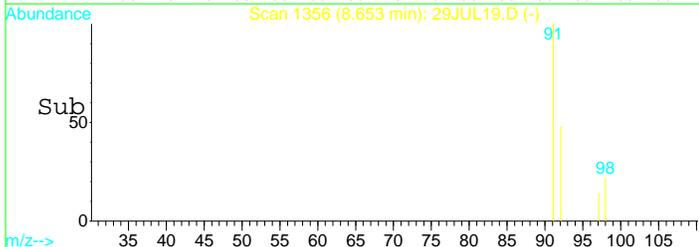
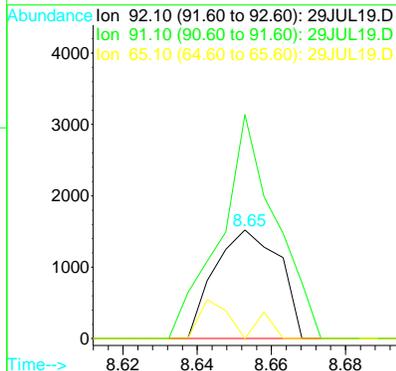
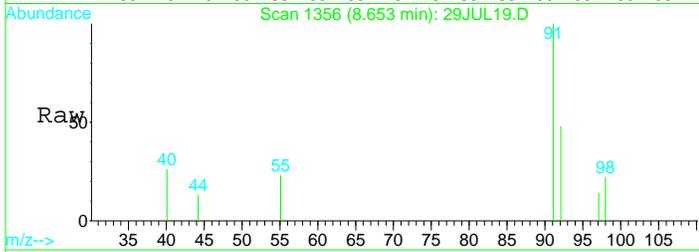
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

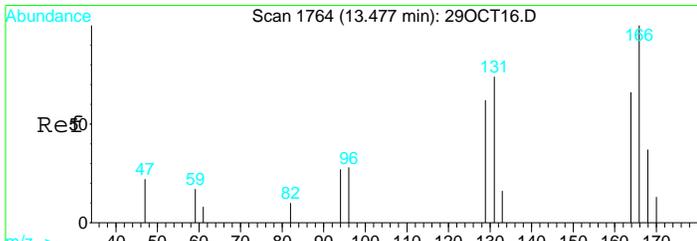
Tgt Ion	Resp	Lower	Upper
98	307770		
100	69.8	49.7	92.3
70	9.7	7.3	13.7



#32
 Toluene
 Concen: 0.08 ug/L
 RT: 8.65 min Scan# 1356
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

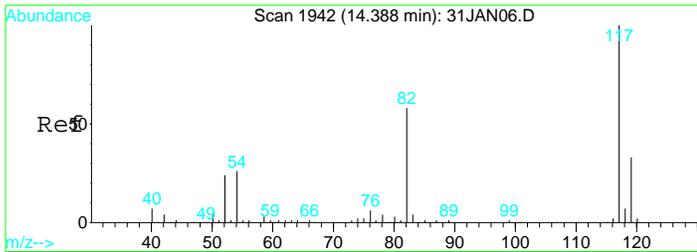
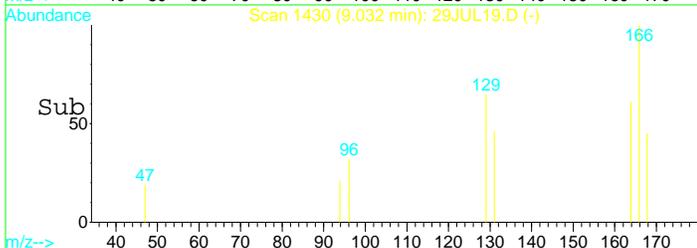
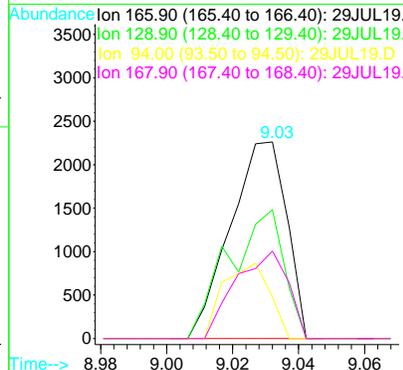
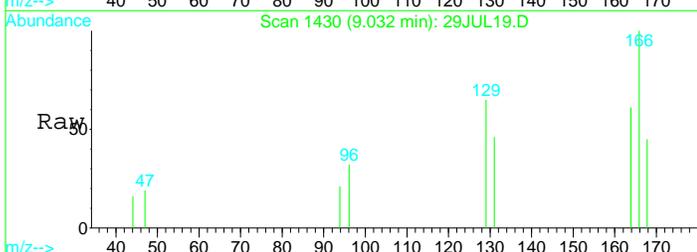
Tgt Ion	Resp	Lower	Upper
92	1846		
91	176.5	122.6	227.6
65	21.8	16.5	30.7





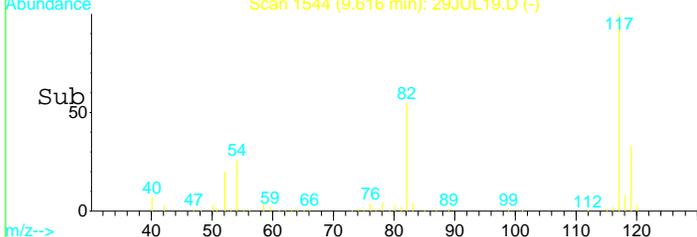
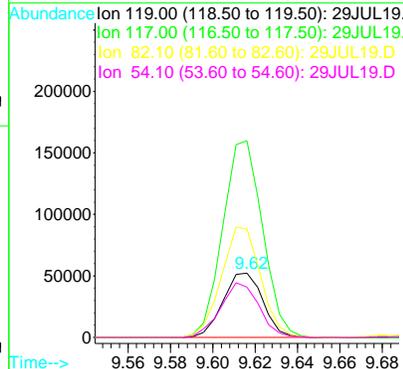
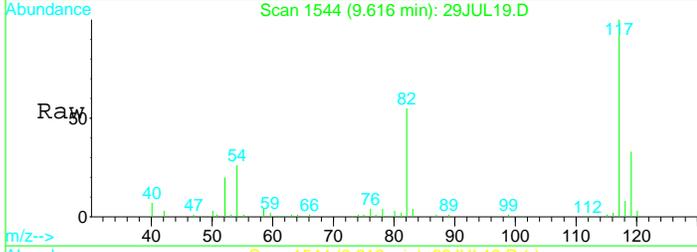
#35
 Tetrachloroethene (PCE)
 Concen: 0.32 ug/L
 RT: 9.03 min Scan# 1430
 Delta R.T. 0.01 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

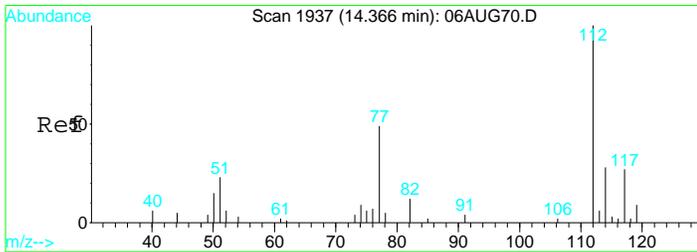
Tgt Ion	Resp	Lower	Upper
166	100		
129	64.3	54.3	100.8
94	31.5	24.1	44.7
168	41.4	28.6	53.0



#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.62 min Scan# 1544
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

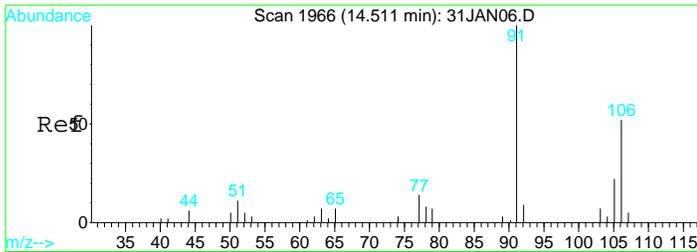
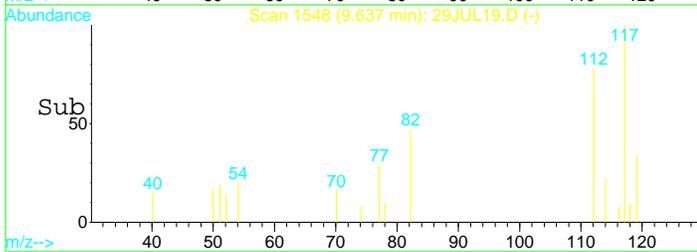
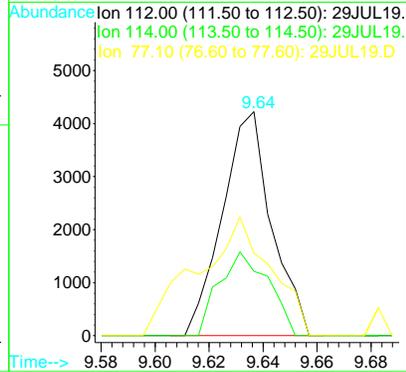
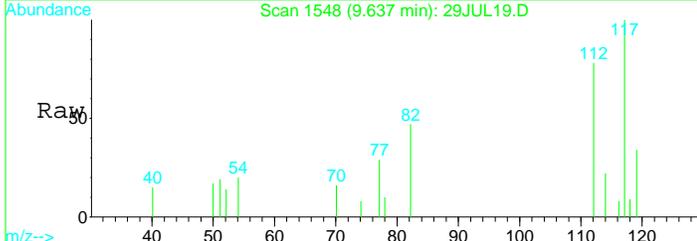
Tgt Ion	Resp	Lower	Upper
119	100		
117	304.6	214.5	398.4
82	168.6	117.7	218.7
54	81.6	55.2	102.4





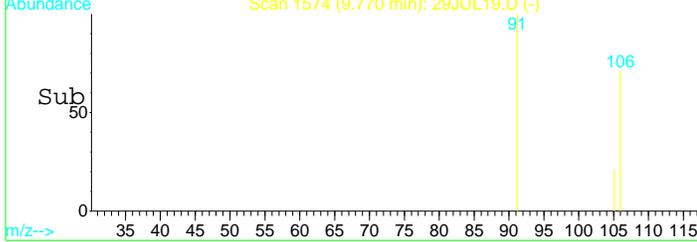
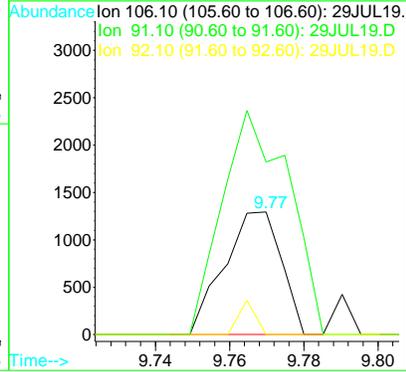
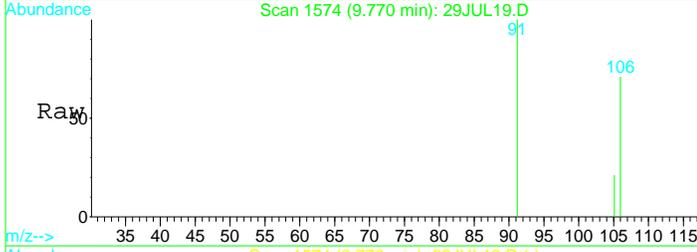
#40
 Chlorobenzene
 Concen: 0.24 ug/L
 RT: 9.64 min Scan# 1548
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

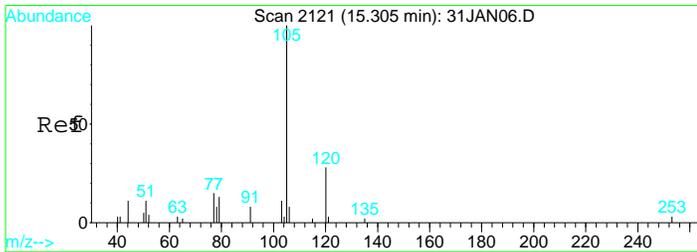
Tgt Ion	Resp	Lower	Upper
112	5359		
114	37.5	20.6	38.4
77	79.5	48.4	90.0



#43
 P+m-Xylene
 Concen: 0.08 ug/L
 RT: 9.77 min Scan# 1574
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

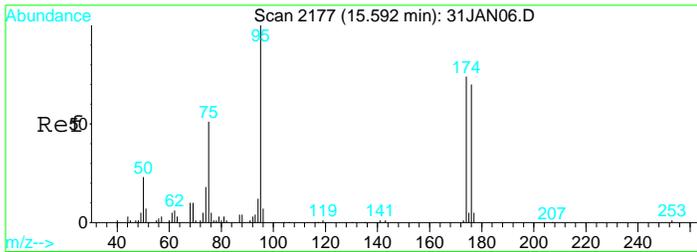
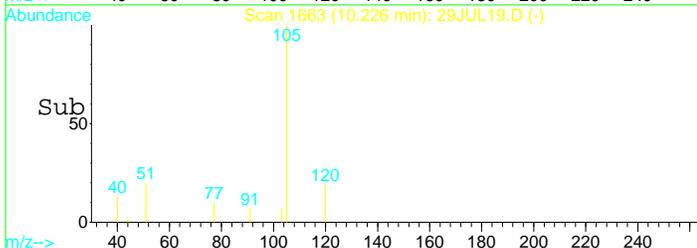
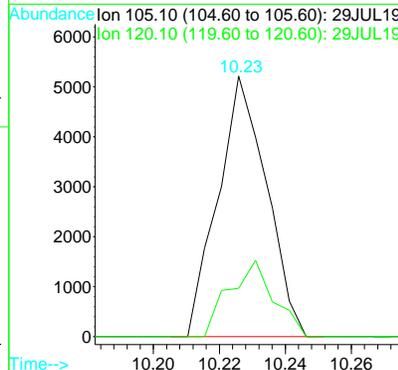
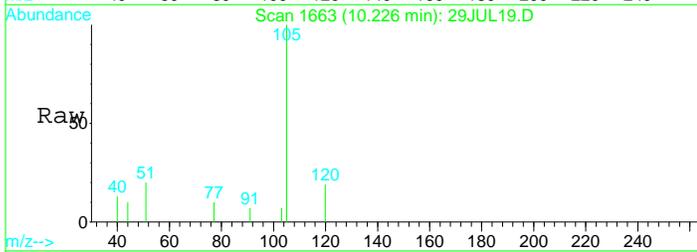
Tgt Ion	Resp	Lower	Upper
106	1388		
91	212.3	135.0	250.6
92	7.9	10.3	19.1#





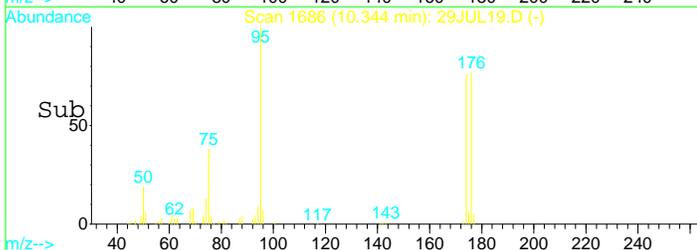
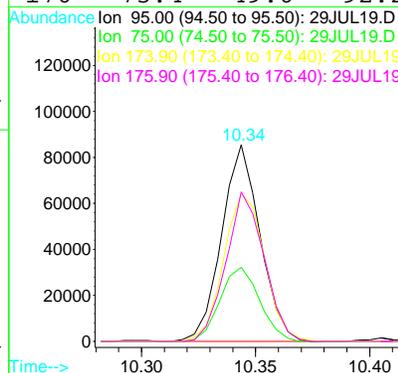
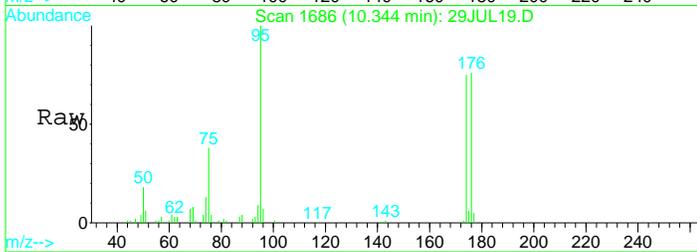
#47
 Isopropylbenzene
 Concen: 0.14 ug/L
 RT: 10.23 min Scan# 1663
 Delta R.T. -0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

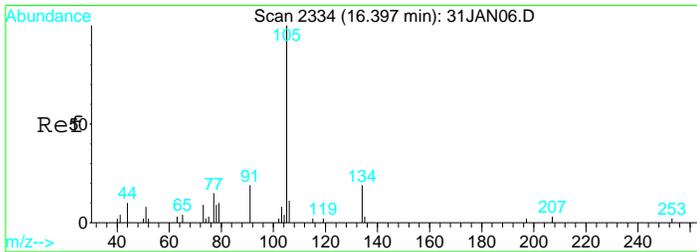
Tgt Ion	Resp	Lower	Upper
105	5312	100	
120	26.9	19.2	35.6



#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

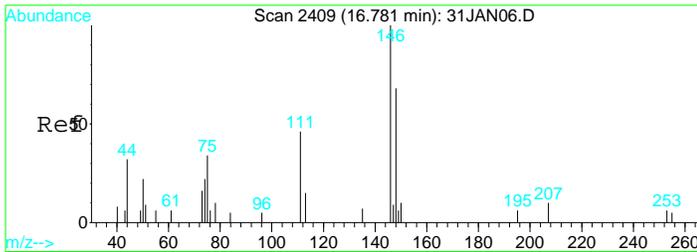
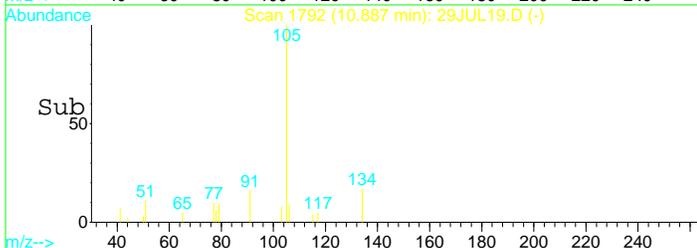
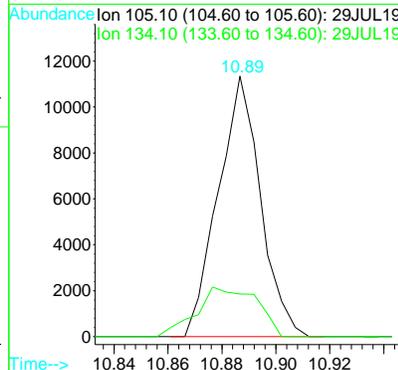
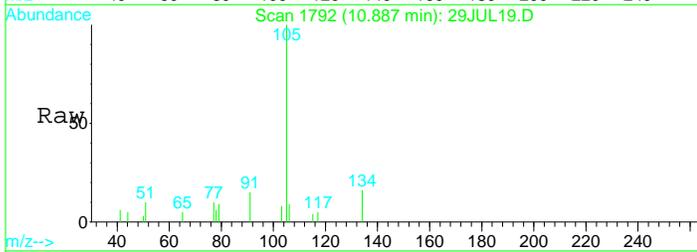
Tgt Ion	Resp	Lower	Upper
95	99945	100	
75	38.9	29.5	54.7
174	79.9	52.3	97.1
176	75.4	49.6	92.2





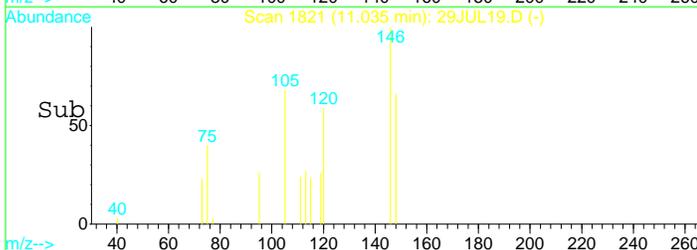
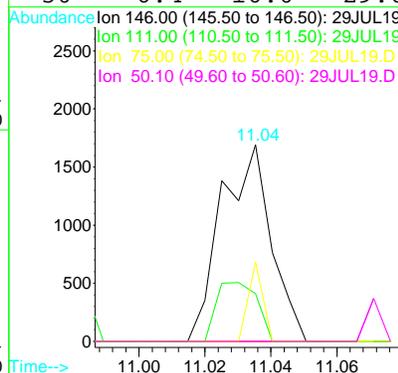
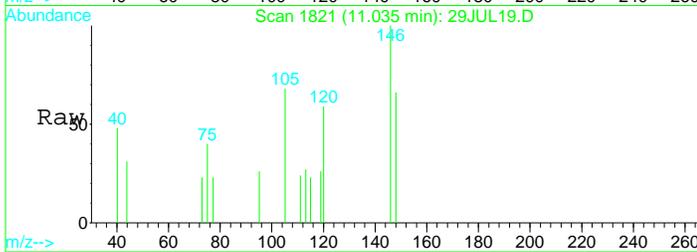
#58
 sec-butylbenzene
 Concen: 0.28 ug/L
 RT: 10.89 min Scan# 1792
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

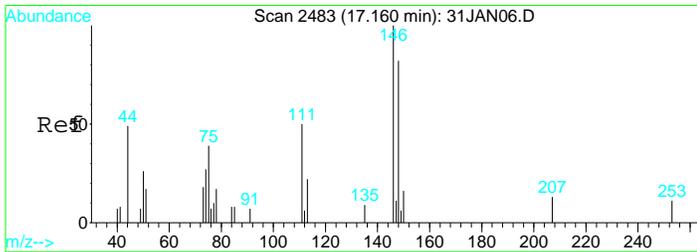
Tgt Ion	Resp	Lower	Upper
105	12335	100	
134	27.1	14.4	26.7#



#61
 1,4-Dichlorobenzene
 Concen: 0.11 ug/L
 RT: 11.04 min Scan# 1821
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

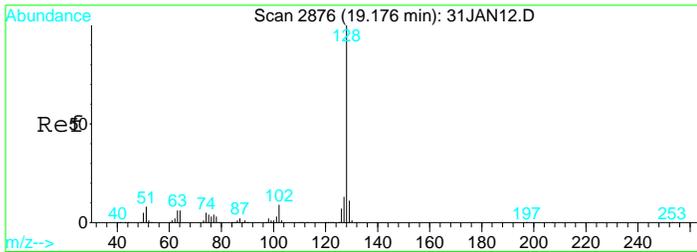
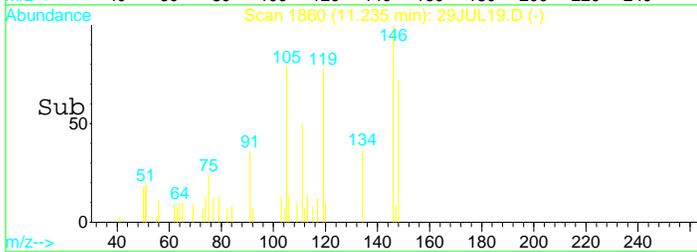
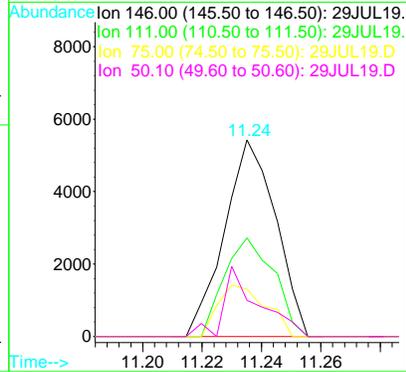
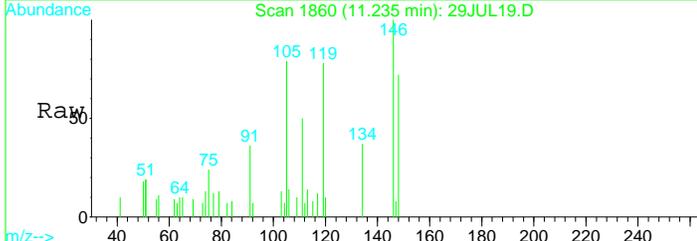
Tgt Ion	Resp	Lower	Upper
146	1769	100	
111	24.6	28.1	52.3#
75	11.8	20.3	37.7#
50	6.4	16.0	29.6#





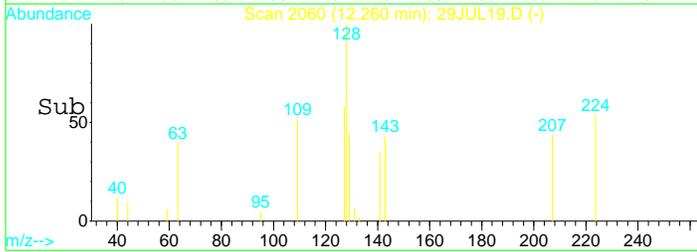
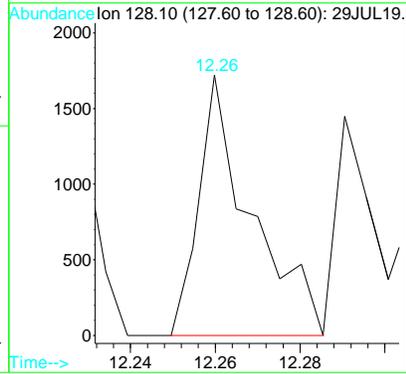
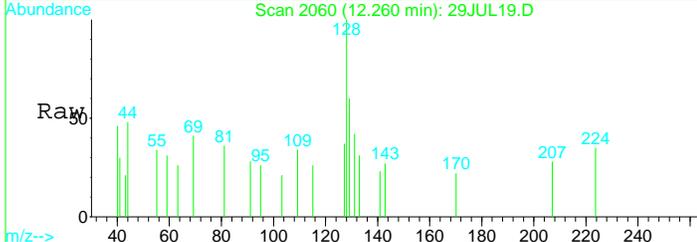
#63
 1,2-Dichlorobenzene
 Concen: 0.44 ug/L
 RT: 11.24 min Scan# 1860
 Delta R.T. -0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

Tgt Ion	Resp	Lower	Upper
146	100		
111	48.5	28.8	53.6
75	24.5	19.8	36.8
50	24.5	9.7	17.9



#68
 naphthalene
 Concen: 0.15 ug/L
 RT: 12.26 min Scan# 2060
 Delta R.T. -0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

Tgt Ion:128 Resp: 1608



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL19.D Vial: 19
 Acq On : 29 Jul 2017 9:26 pm Operator: MGC
 Sample : 1720405-01 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:45 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172662	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	252151	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	68677	10.00	ug/L	0.00

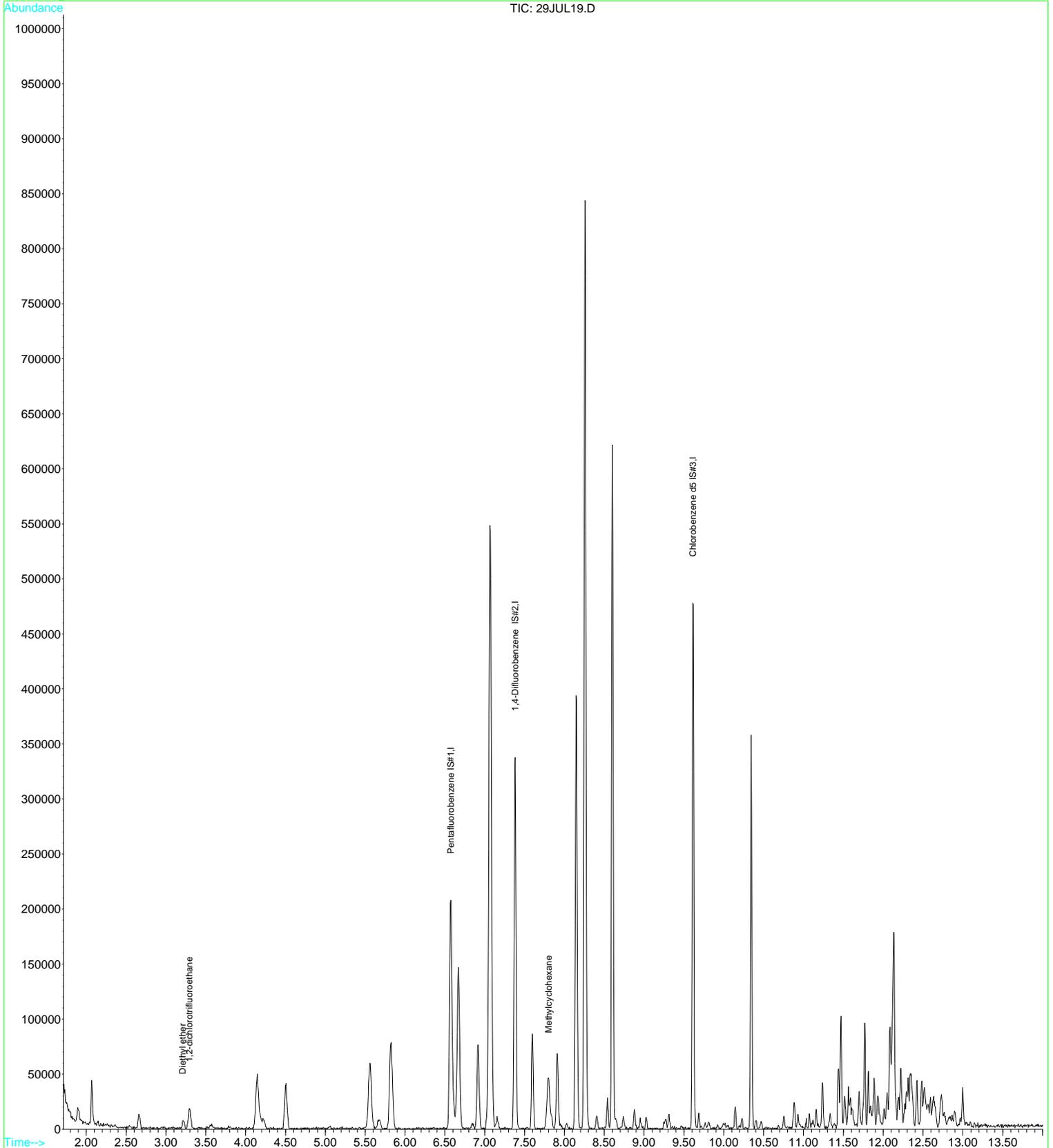
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) 1,2-dichlorotrifluoroethan	3.29	67	13204	1.16	ug/L #	74
5) Diethyl ether	3.21	59	5234	1.21	ug/L	89
31) Methylcyclohexane	7.81	55	16530	1.07	ug/L #	65

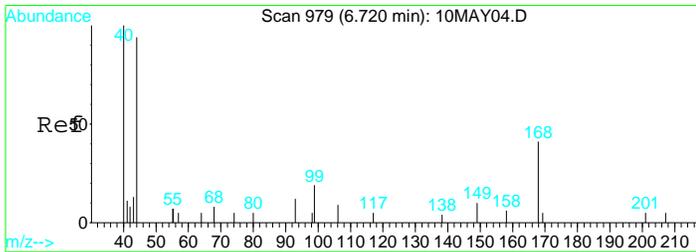
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL19.D
Acq On : 29 Jul 2017 9:26 pm
Sample : 1720405-01
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:45 2017

Vial: 19
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

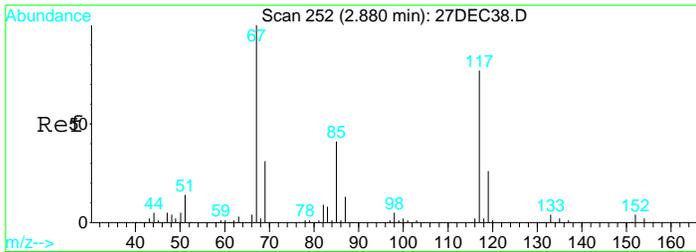
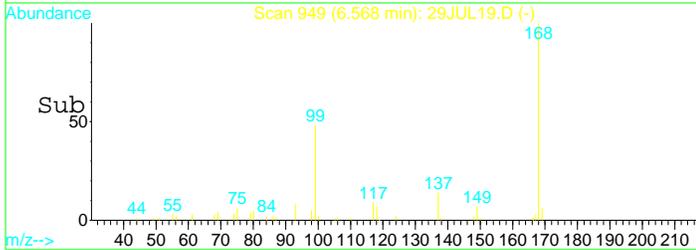
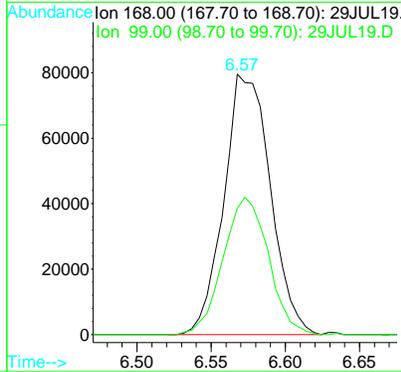
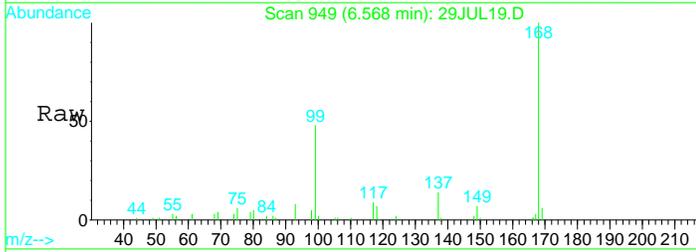
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





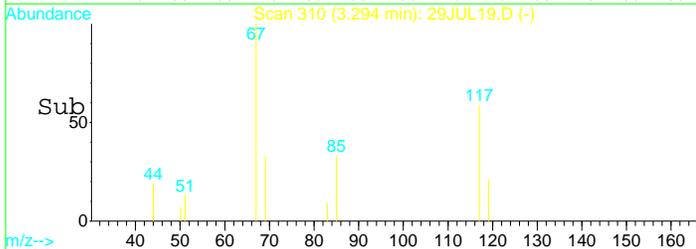
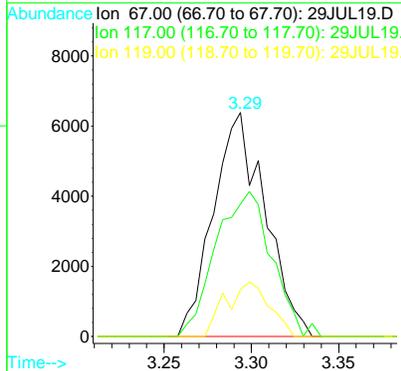
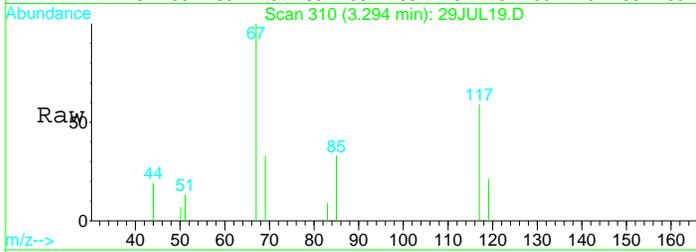
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 949
 Delta R.T. -0.01 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

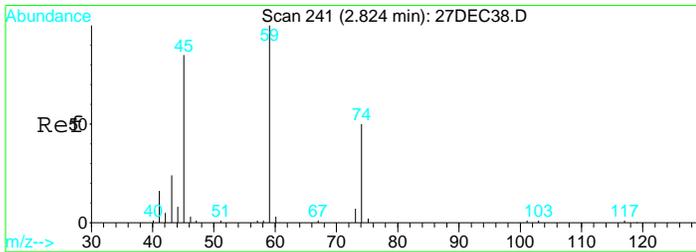
Tgt Ion	Resp	Lower	Upper
168	172662		
168	100		
99	51.4	36.1	67.1



#4
 1,2-dichlorotrifluoroethane
 Concen: 1.16 ug/L
 RT: 3.29 min Scan# 310
 Delta R.T. -0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

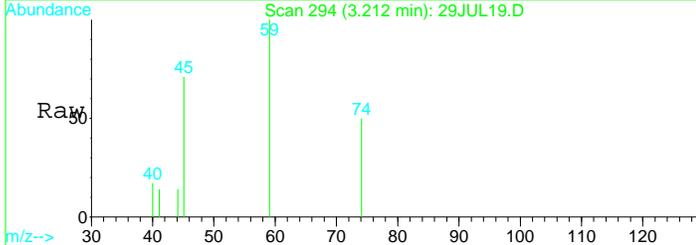
Tgt Ion	Resp	Lower	Upper
67	13204		
67	100		
117	70.0	36.7	68.1#
119	20.6	5.9	10.9#



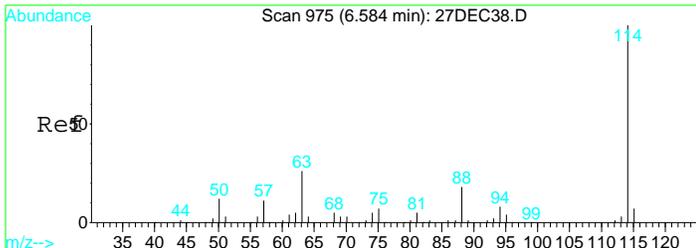
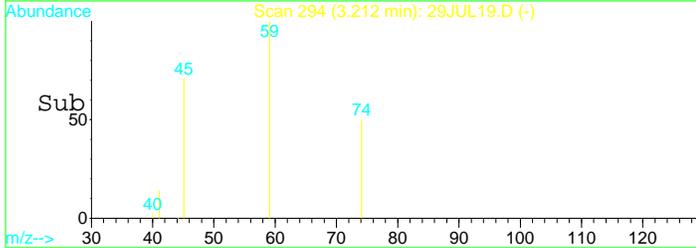
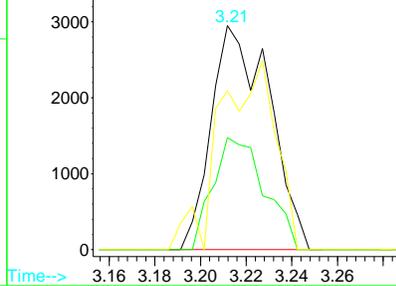


#5
 Diethyl ether
 Concen: 1.21 ug/L
 RT: 3.21 min Scan# 294
 Delta R.T. -0.01 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

Tgt Ion	Resp	Lower	Upper
59	100		
74	44.3	33.7	62.7
45	81.2	65.7	122.1

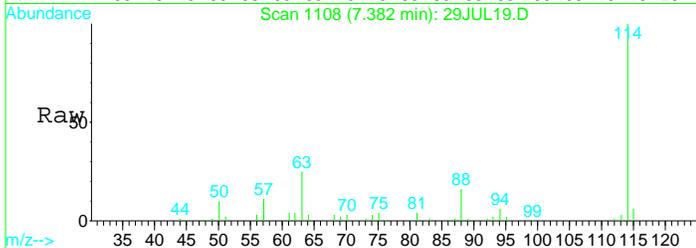


Abundance Ion 59.10 (58.80 to 59.80): 29JUL19.D
 Ion 74.10 (73.80 to 74.80): 29JUL19.D
 Ion 45.10 (44.80 to 45.80): 29JUL19.D

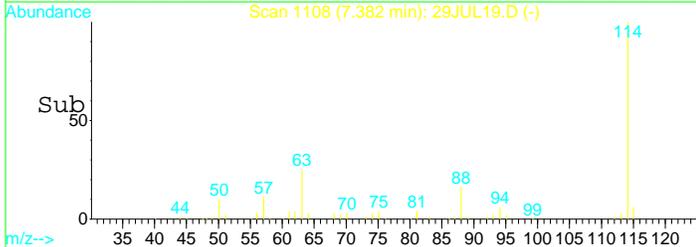
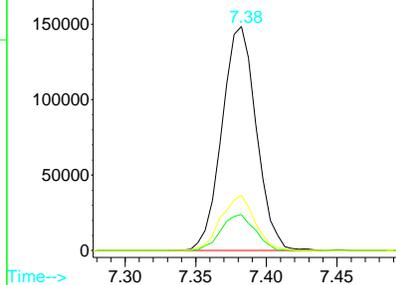


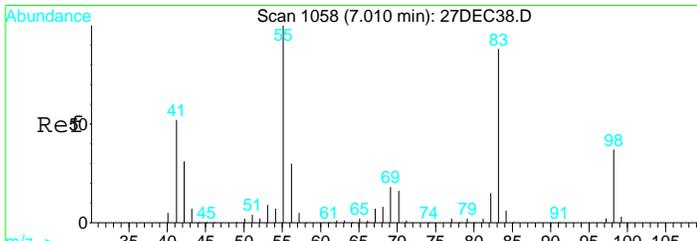
#29
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

Tgt Ion	Resp	Lower	Upper
114	100		
88	15.9	11.1	20.7
63	24.2	16.4	30.4



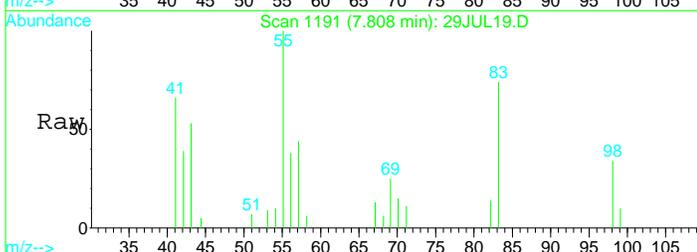
Abundance Ion 114.00 (113.70 to 114.70): 29JUL19.D
 Ion 88.00 (87.70 to 88.70): 29JUL19.D
 Ion 63.10 (62.80 to 63.80): 29JUL19.D



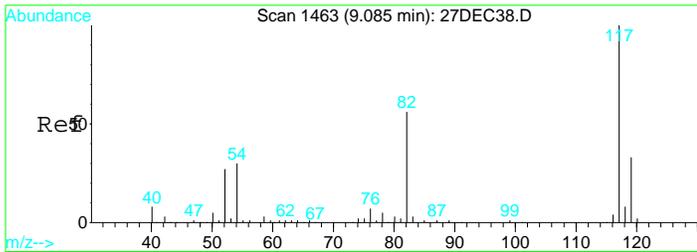
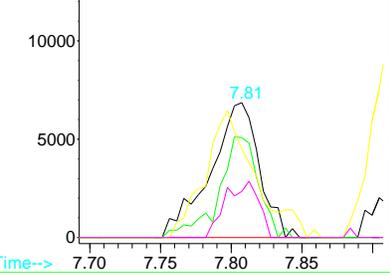
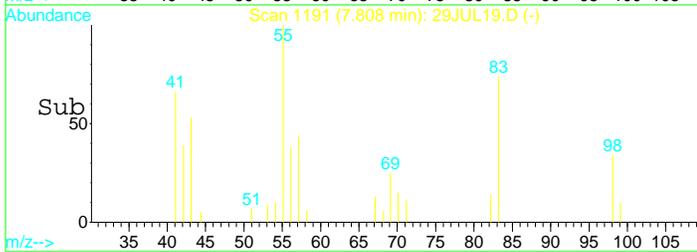


#31
 Methylcyclohexane
 Concen: 1.07 ug/L
 RT: 7.81 min Scan# 1191
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

Tgt Ion	Resp	Lower	Upper
55	16530		
83	60.8	56.7	105.3
41	95.7	34.9	64.9#
98	28.3	28.3	52.5

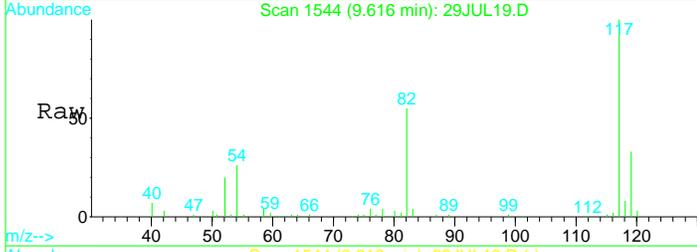


Abundance Ion 55.10 (54.80 to 55.80): 29JUL19.D
 Ion 83.10 (82.80 to 83.80): 29JUL19.D
 Ion 41.10 (40.80 to 41.80): 29JUL19.D
 Ion 98.10 (97.80 to 98.80): 29JUL19.D

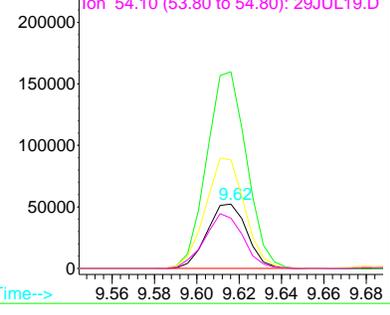
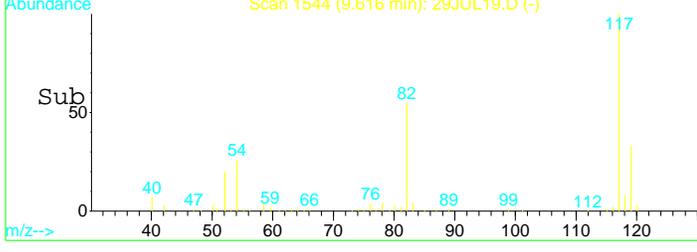


#36
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.62 min Scan# 1544
 Delta R.T. 0.00 min
 Lab File: 29JUL19.D
 Acq: 29 Jul 2017 9:26 pm

Tgt Ion	Resp	Lower	Upper
119	68677		
117	304.6	217.1	403.3
82	168.6	122.7	227.9
54	81.6	55.2	102.6



Abundance Ion 119.00 (118.70 to 119.70): 29JUL19.D
 Ion 117.00 (116.70 to 117.70): 29JUL19.D
 Ion 82.10 (81.80 to 82.80): 29JUL19.D
 Ion 54.10 (53.80 to 54.80): 29JUL19.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL16.D Vial: 16
 Acq On : 29 Jul 2017 8:17 pm Operator: MGC
 Sample : 1720405-02 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 30 5:30 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	178590	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	273726	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	71489	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	56026	10.74	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	107.40%
31) Toluene d8 SMC#2	8.60	98	319641	9.46	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.60%
49) Bromofluorobenzene SMC#3	10.34	95	107416	10.06	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.60%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	9396	0.70	ug/L	92
12) T-1,2-dichloroethene	4.50	96	6295	0.70	ug/L	97
15) Cis-1,2-dichloroethene	5.83	96	81302	8.72	ug/L	86
25) Trichloroethene	7.60	130	12128	1.29	ug/L	87
63) 1,2-Dichlorobenzene	11.24	146	2025	0.13	ug/L	98

(#) = qualifier out of range (m) = manual integration

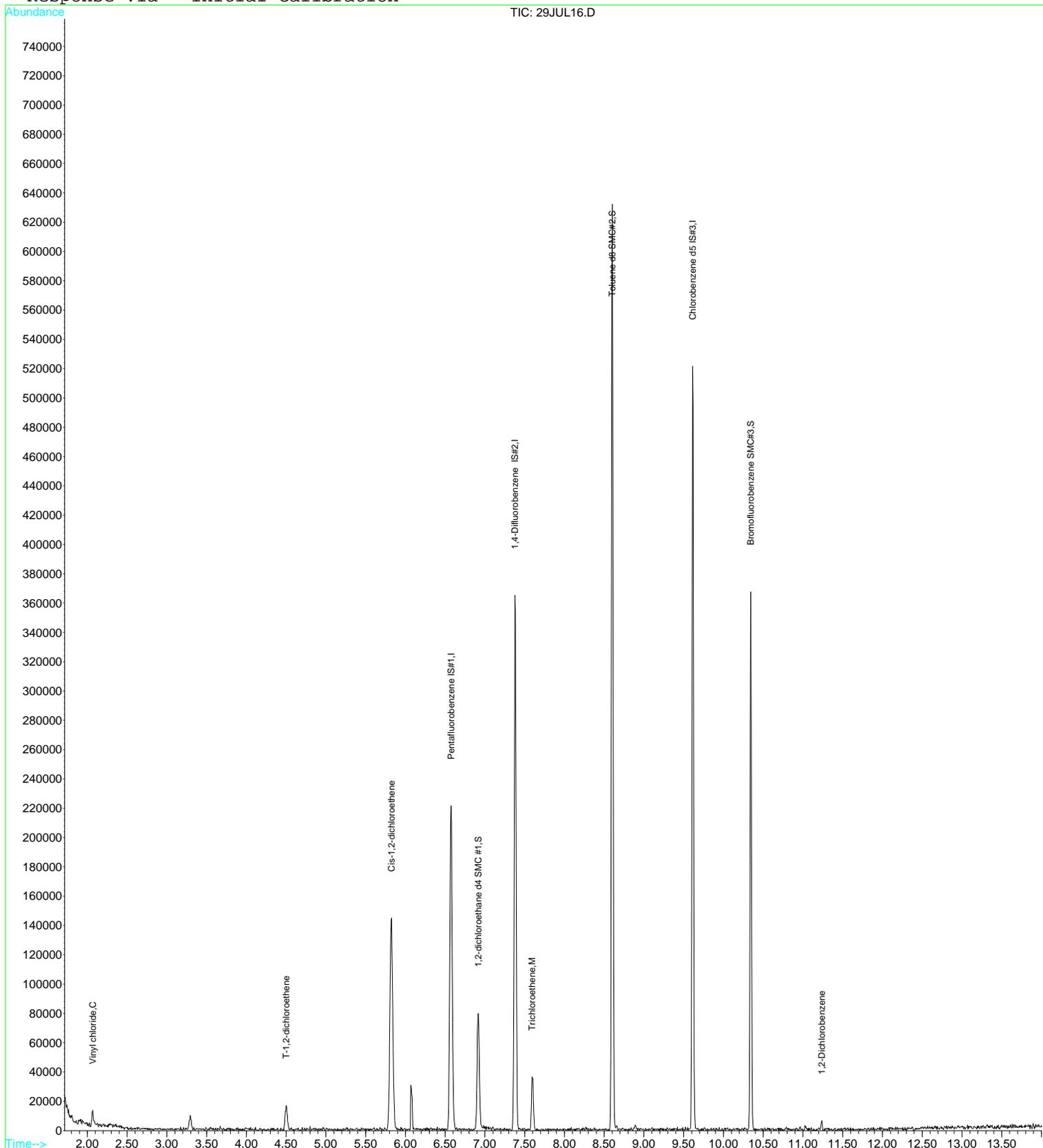
29JUL16.D 82605.M Sun Jul 30 05:40:37 2017

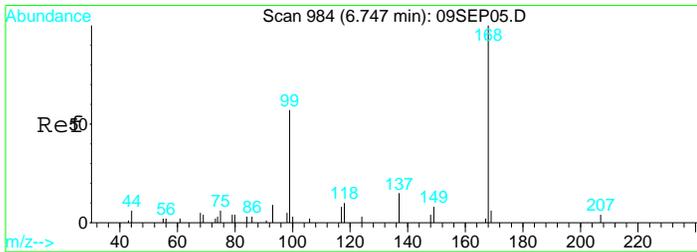
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL16.D
 Acq On : 29 Jul 2017 8:17 pm
 Sample : 1720405-02
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:30 2017

Vial: 16
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

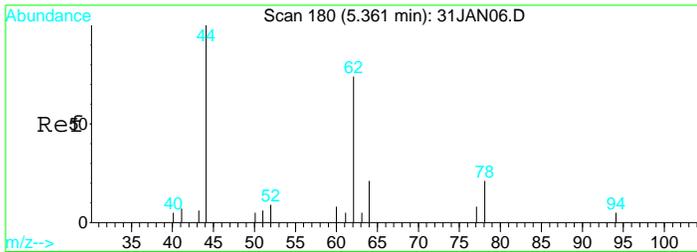
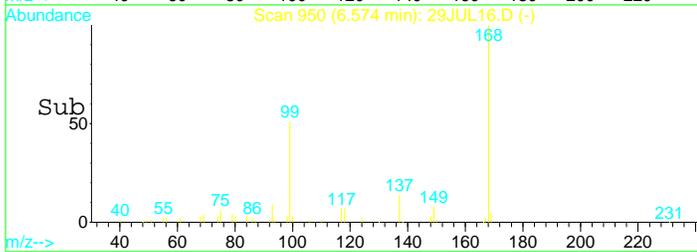
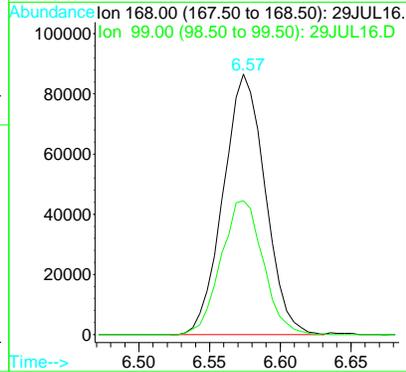
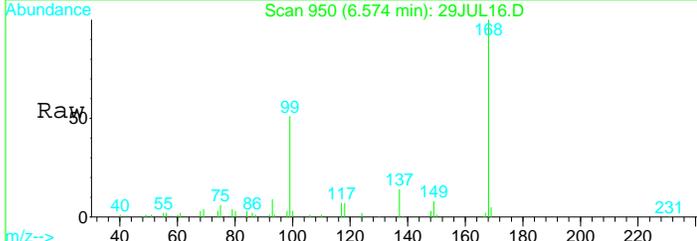
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 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





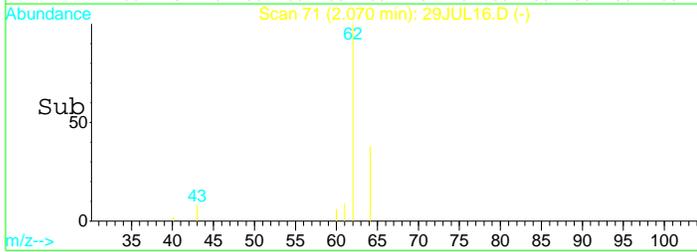
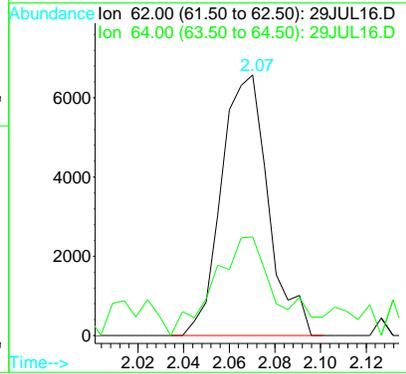
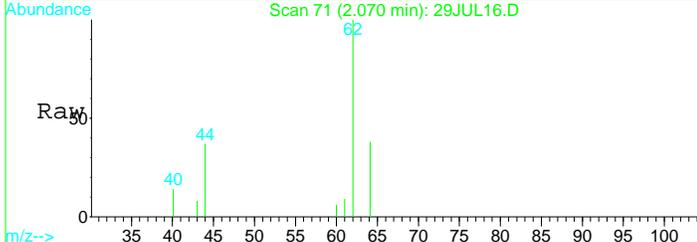
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

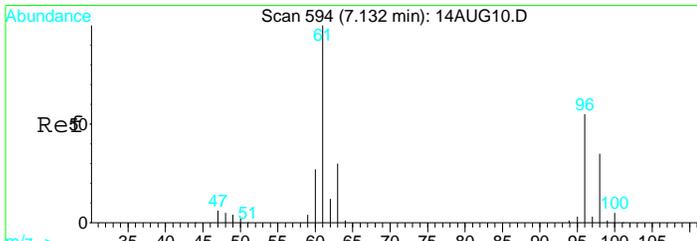
Tgt Ion: 168 Resp: 178590
 Ion Ratio Lower Upper
 168 100
 99 51.7 38.7 71.9



#4
 Vinyl chloride
 Concen: 0.70 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

Tgt Ion: 62 Resp: 9396
 Ion Ratio Lower Upper
 62 100
 64 50.4 39.3 72.9

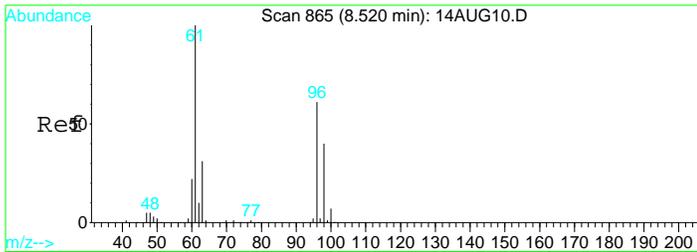
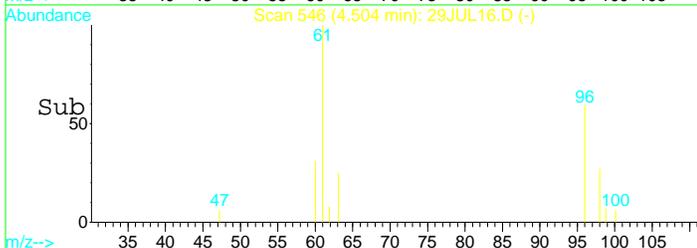
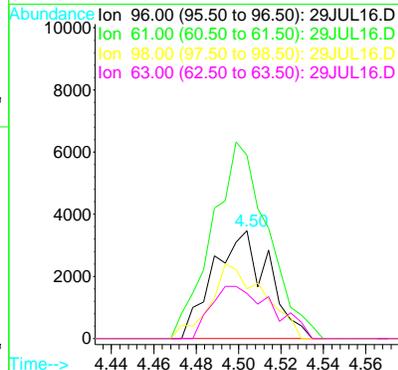
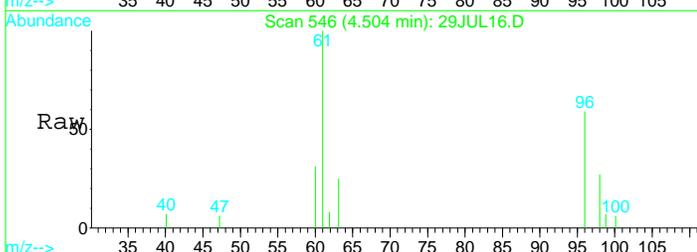




#12
 T-1,2-dichloroethene
 Concen: 0.70 ug/L
 RT: 4.50 min Scan# 546
 Delta R.T. 0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

Tgt Ion: 96 Resp: 6295

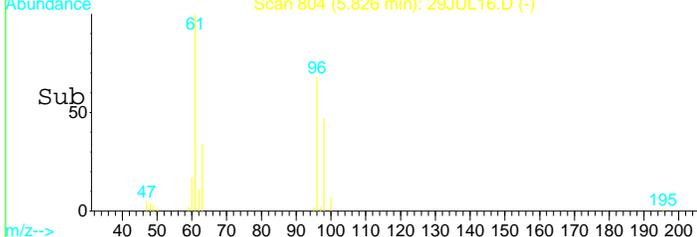
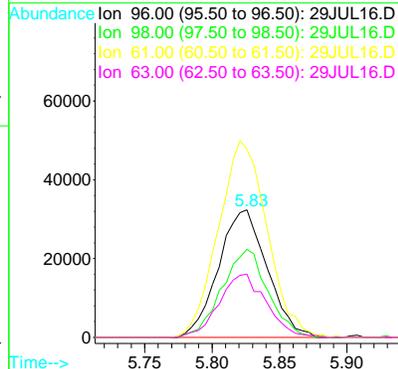
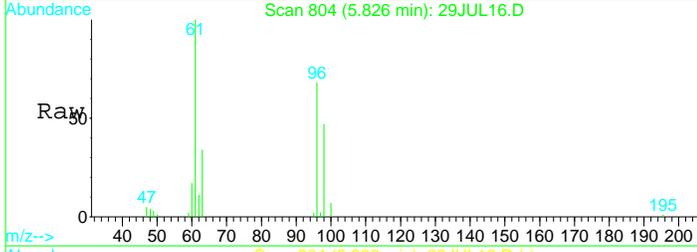
Ion	Ratio	Lower	Upper
96	100		
61	183.2	129.4	240.4
98	67.0	41.5	77.1
63	54.3	39.3	73.1

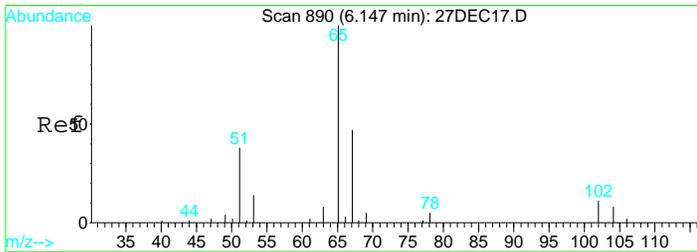


#15
 Cis-1,2-dichloroethene
 Concen: 8.72 ug/L
 RT: 5.83 min Scan# 804
 Delta R.T. 0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

Tgt Ion: 96 Resp: 81302

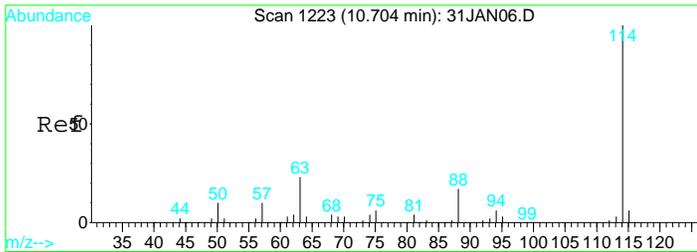
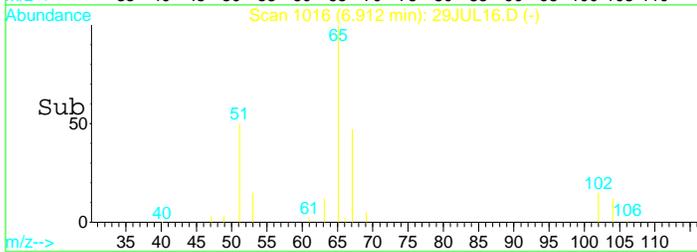
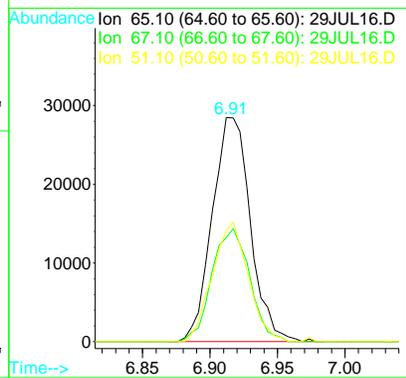
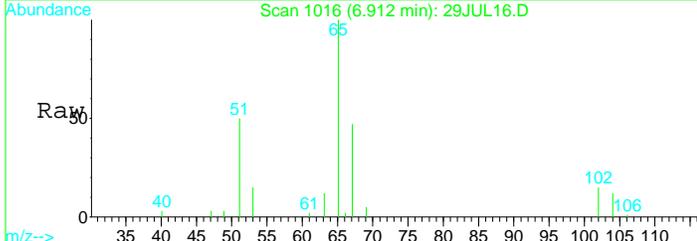
Ion	Ratio	Lower	Upper
96	100		
98	65.1	51.9	96.3
61	154.1	122.8	228.0
63	47.8	42.1	78.3





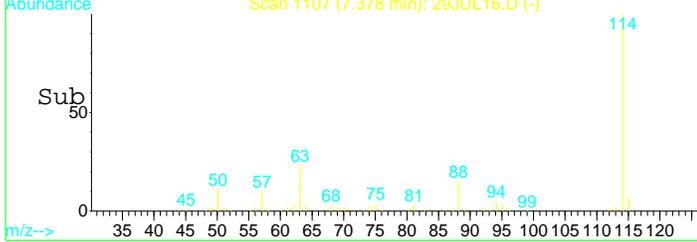
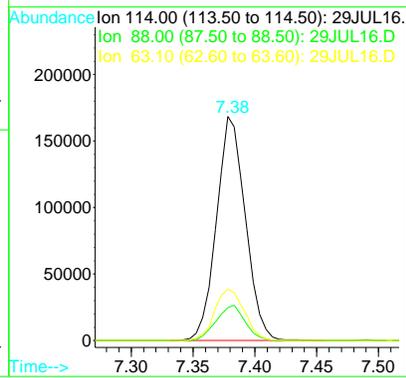
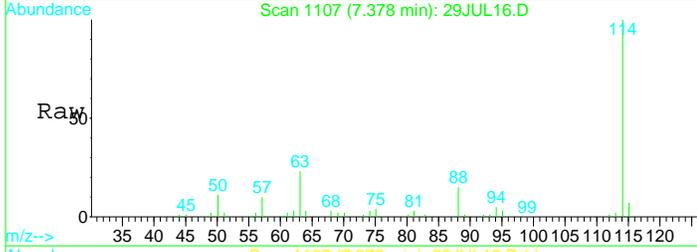
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

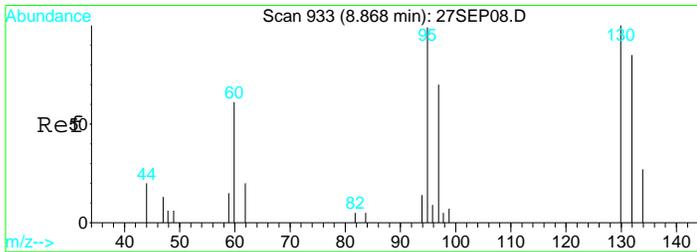
Tgt Ion	Resp	Lower	Upper
65	100		
67	50.0	36.2	67.2
51	50.3	42.0	78.0



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

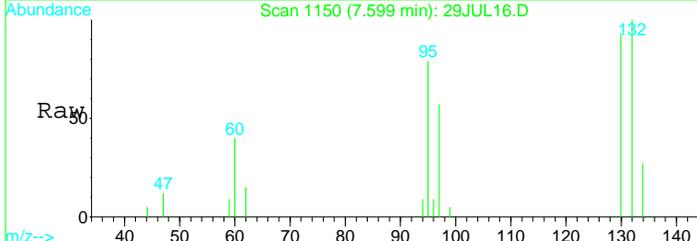
Tgt Ion	Resp	Lower	Upper
114	100		
88	15.6	11.7	21.7
63	23.6	16.7	30.9



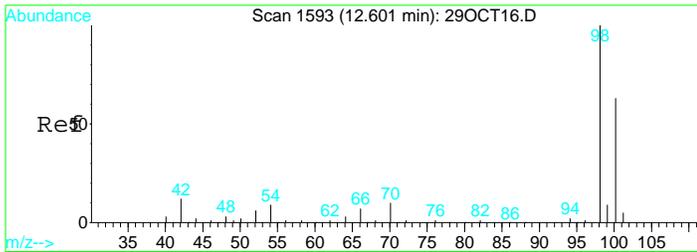
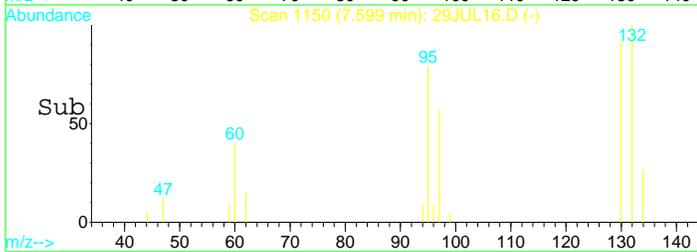
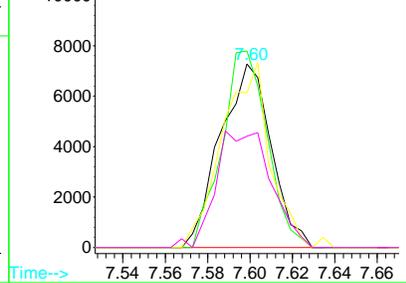


#25
 Trichloroethene
 Concen: 1.29 ug/L
 RT: 7.60 min Scan# 1150
 Delta R.T. 0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

Tgt Ion	Resp	Lower	Upper
130	100		
132	95.8	66.1	122.7
95	95.5	86.1	159.9
97	69.2	52.8	98.0

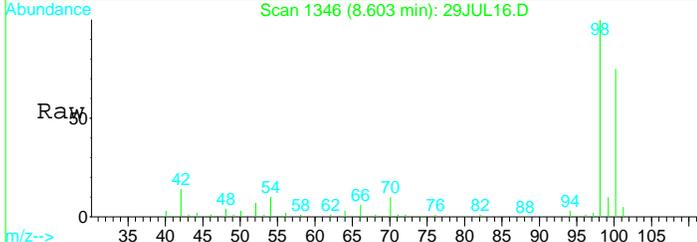


Abundance Ion 129.90 (129.40 to 130.40): 29JUL16.D
 Ion 131.90 (131.40 to 132.40): 29JUL16.D
 Ion 95.00 (94.50 to 95.50): 29JUL16.D
 Ion 97.00 (96.50 to 97.50): 29JUL16.D

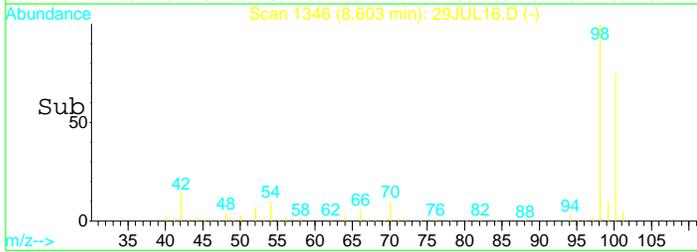
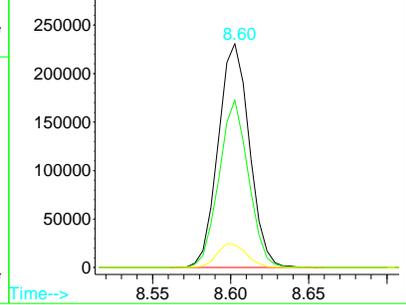


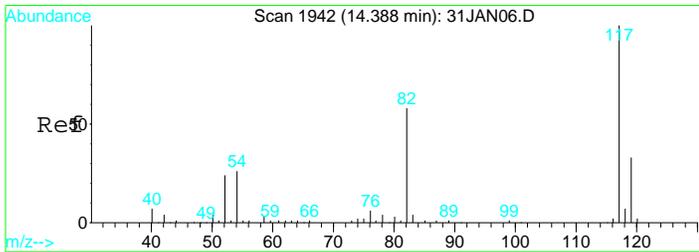
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

Tgt Ion	Resp	Lower	Upper
98	100		
100	70.6	49.7	92.3
70	10.2	7.3	13.7



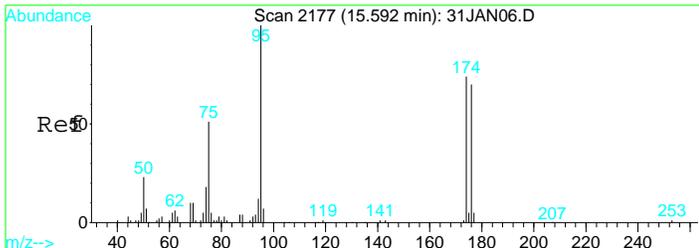
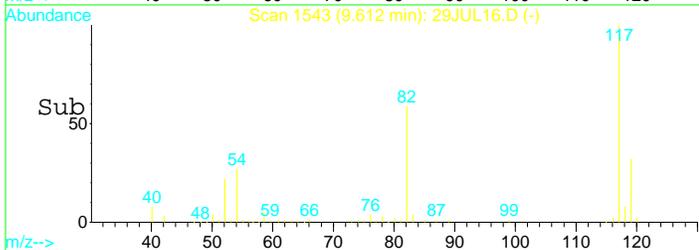
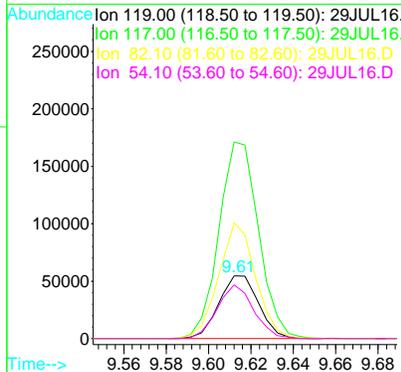
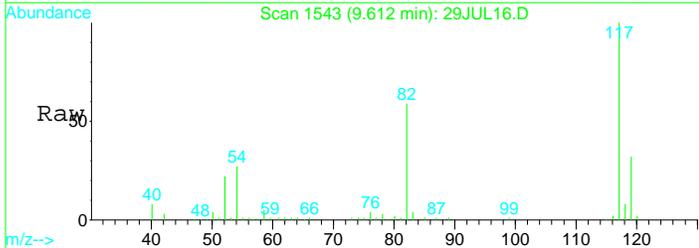
Abundance Ion 98.10 (97.60 to 98.60): 29JUL16.D
 Ion 100.10 (99.60 to 100.60): 29JUL16.D
 Ion 70.10 (69.60 to 70.60): 29JUL16.D





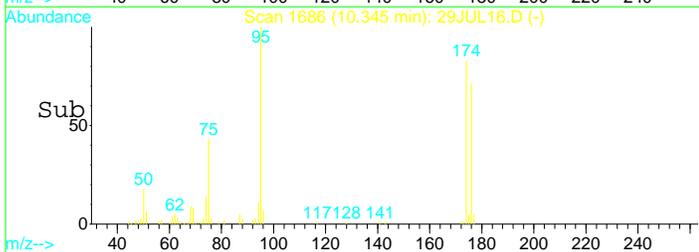
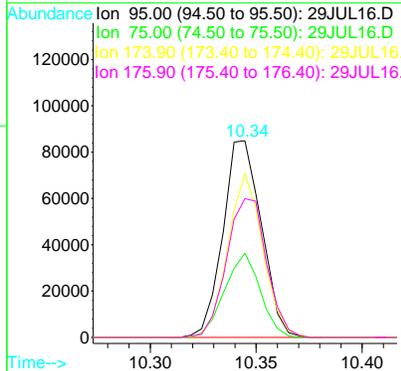
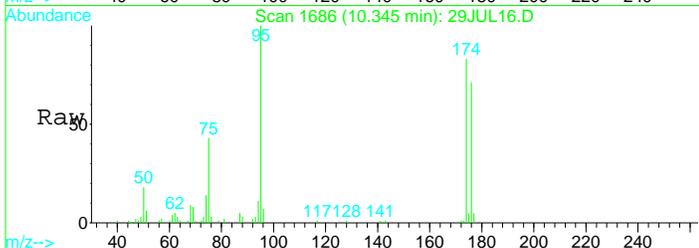
#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

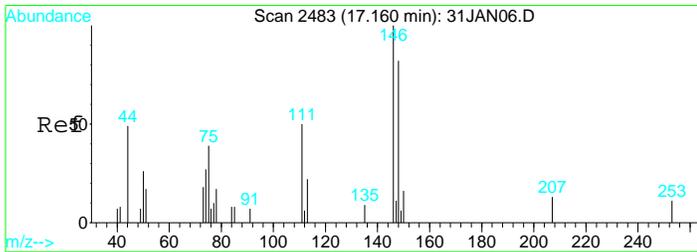
Tgt Ion	Resp	Lower	Upper
119	71489		
117	311.4	214.5	398.4
82	170.6	117.7	218.7
54	78.3	55.2	102.4



#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

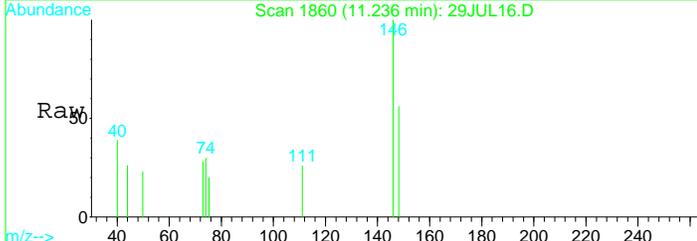
Tgt Ion	Resp	Lower	Upper
95	107416		
95	100		
75	39.5	29.5	54.7
174	75.8	52.3	97.1
176	73.4	49.6	92.2



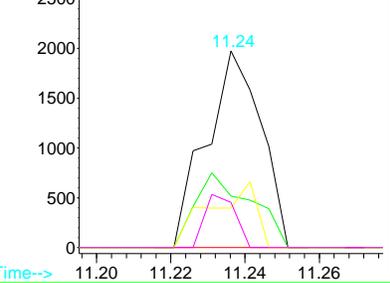
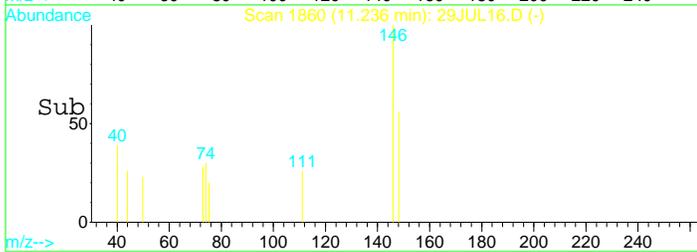


#63
 1,2-Dichlorobenzene
 Concen: 0.13 ug/L
 RT: 11.24 min Scan# 1860
 Delta R.T. -0.00 min
 Lab File: 29JUL16.D
 Acq: 29 Jul 2017 8:17 pm

Tgt Ion	Resp	Lower	Upper
146	100		
111	38.8	28.8	53.6
75	28.2	19.8	36.8
50	15.0	9.7	17.9



Abundance Ion 146.00 (145.50 to 146.50): 29JUL16.D
 Ion 111.00 (110.50 to 111.50): 29JUL16.D
 Ion 75.00 (74.50 to 75.50): 29JUL16.D
 Ion 50.10 (49.60 to 50.60): 29JUL16.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL16.D Vial: 16
 Acq On : 29 Jul 2017 8:17 pm Operator: MGC
 Sample : 1720405-02 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:44 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	178590	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	273726	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	71489	10.00	ug/L	0.00
Target Compounds						Qvalue
4) 1,2-dichlorotrifluoroethan	3.30	67	6212	0.53	ug/L	97

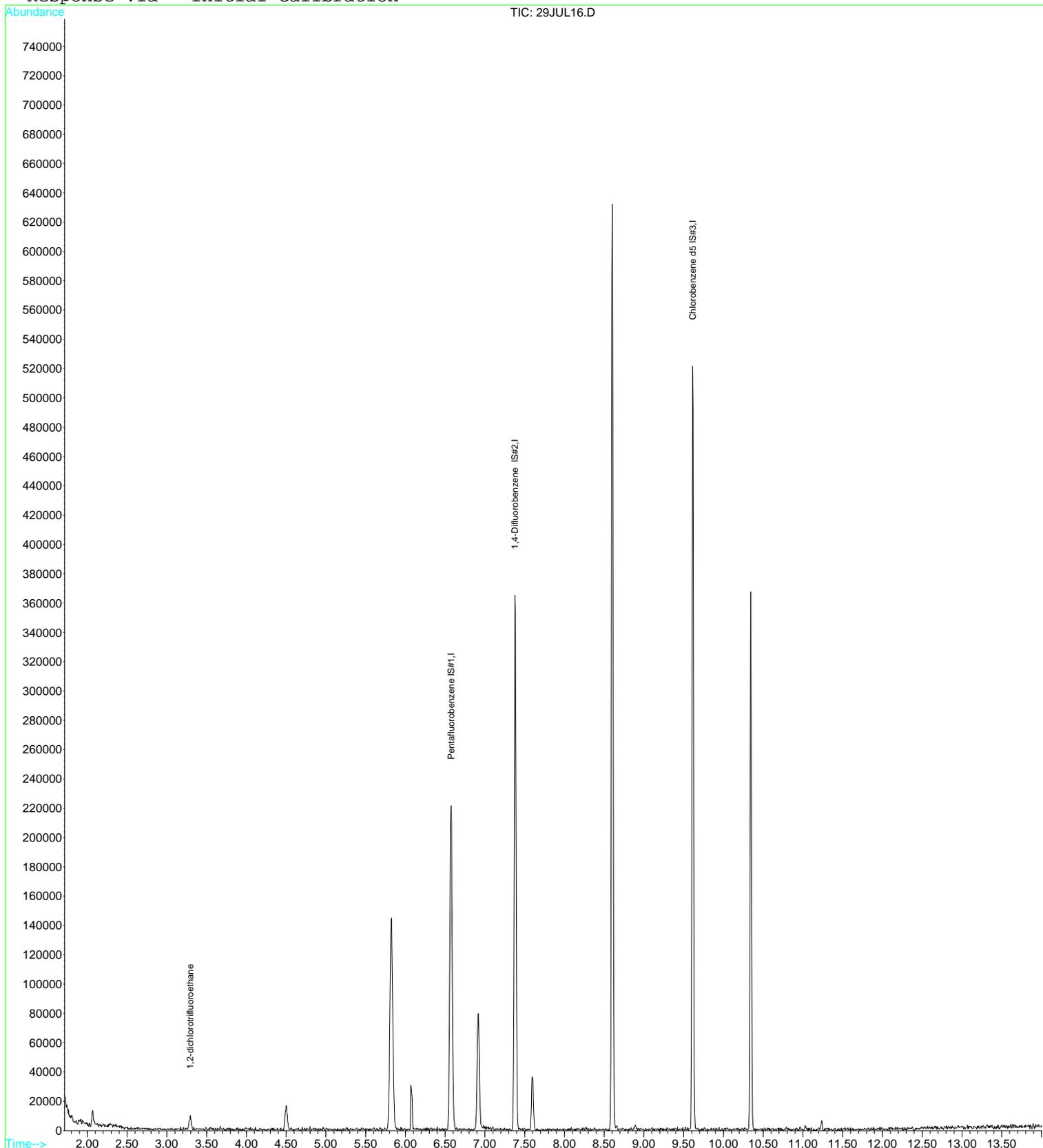
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL16.D
Acq On : 29 Jul 2017 8:17 pm
Sample : 1720405-02
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:44 2017

Vial: 16
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL17.D Vial: 17
 Acq On : 29 Jul 2017 8:40 pm Operator: MGC
 Sample : 1720405-03 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 30 5:31 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	177436	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	258068	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	73062	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	51563	9.95	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	99.50%
31) Toluene d8 SMC#2	8.60	98	314966	9.88	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.80%
49) Bromofluorobenzene SMC#3	10.34	95	100916	9.25	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	92.50%

Target Compounds

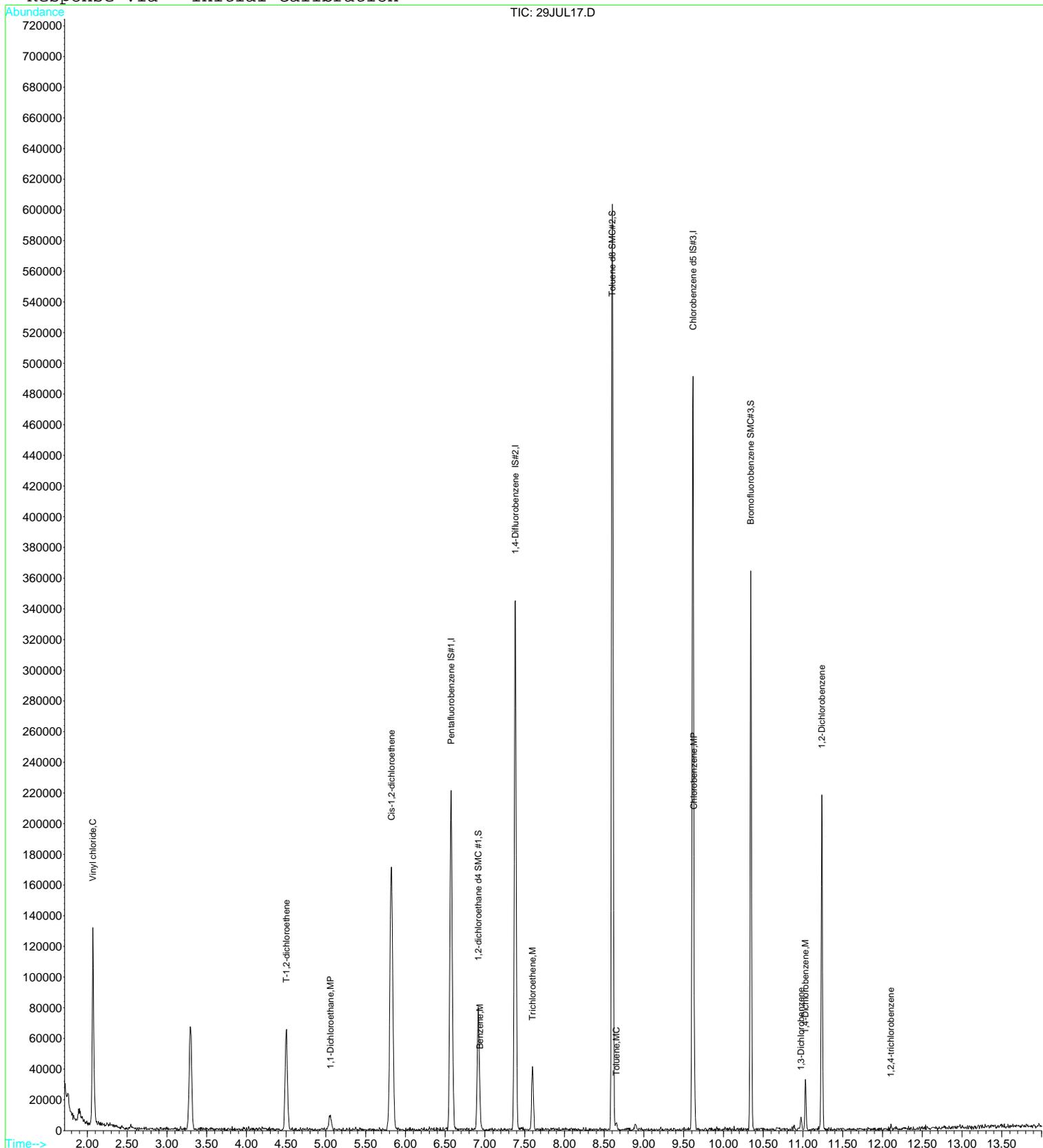
	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	112643	8.47	ug/L #	69
12) T-1,2-dichloroethene	4.50	96	26039	2.93	ug/L	94
13) 1,1-Dichloroethane	5.06	63	12714	0.67	ug/L	98
15) Cis-1,2-dichloroethene	5.82	96	95748	10.33	ug/L	90
23) Benzene	6.94	78	5784	0.16	ug/L #	1
25) Trichloroethene	7.60	130	12544	1.42	ug/L	83
32) Toluene	8.65	92	1811	0.08	ug/L #	78
40) Chlorobenzene	9.63	112	14683	0.61	ug/L	95
60) 1,3-Dichlorobenzene	10.97	146	2989m	0.16	ug/L	
61) 1,4-Dichlorobenzene	11.03	146	11123	0.62	ug/L	91
63) 1,2-Dichlorobenzene	11.24	146	72422	4.60	ug/L	96
66) 1,2,4-trichlorobenzene	12.11	180	805	0.09	ug/L	82

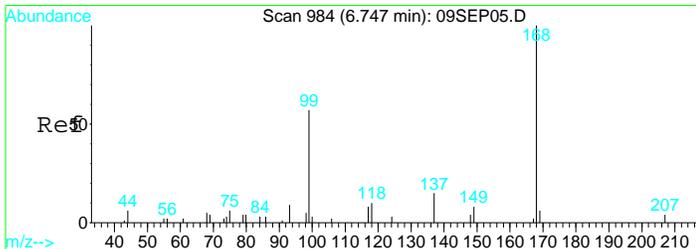
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL17.D
Acq On : 29 Jul 2017 8:40 pm
Sample : 1720405-03
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:31 2017

Vial: 17
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

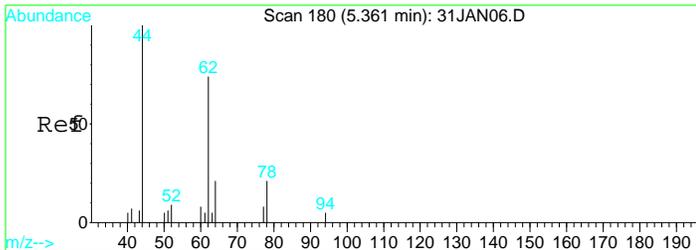
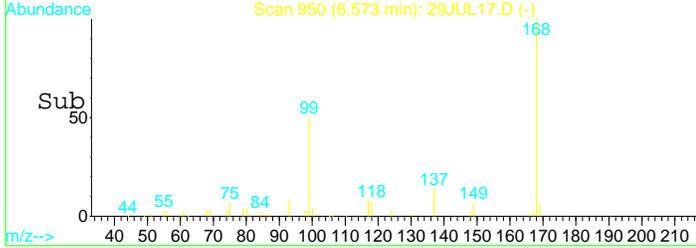
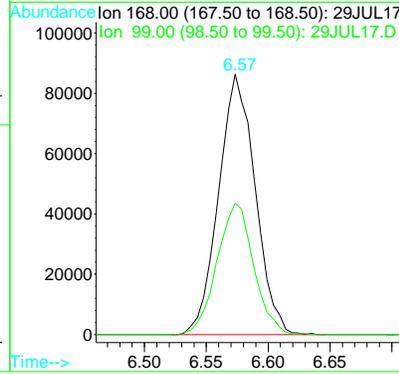
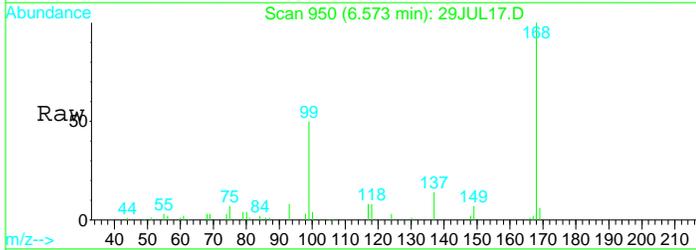
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





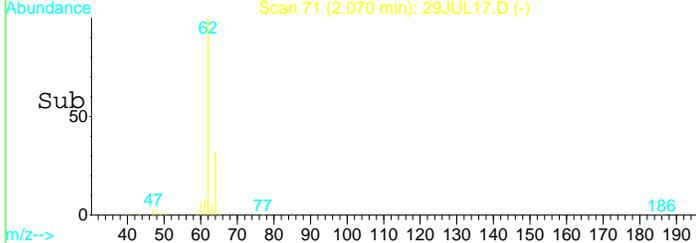
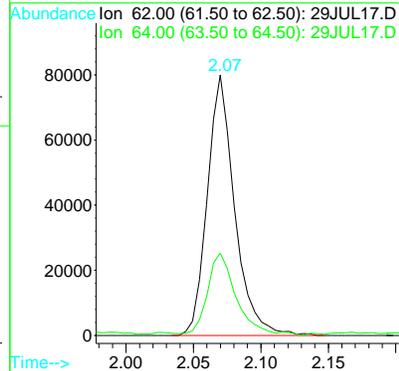
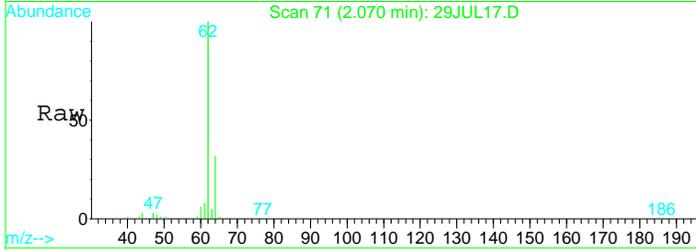
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

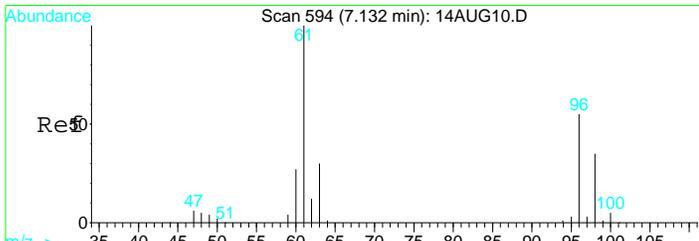
Tgt Ion	Resp	Lower	Upper
168	100		
99	50.5	38.7	71.9



#4
 Vinyl chloride
 Concen: 8.47 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

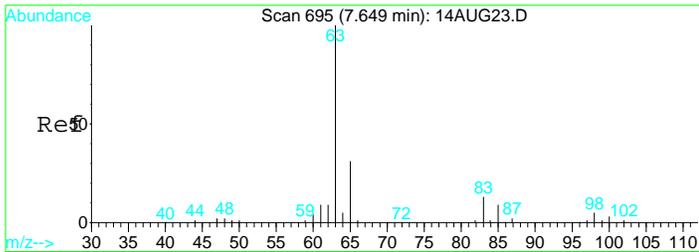
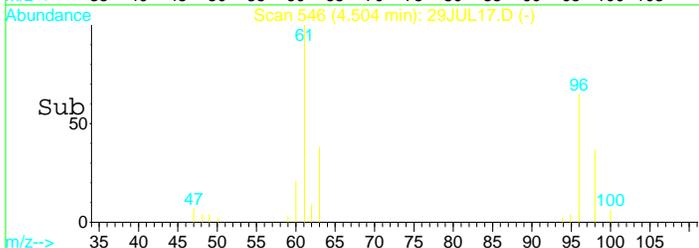
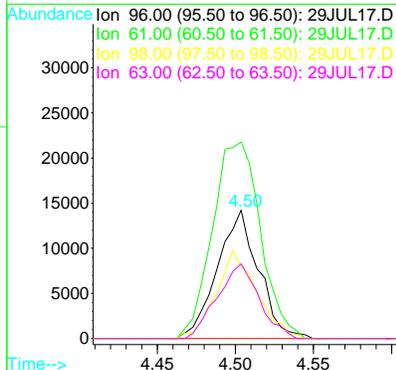
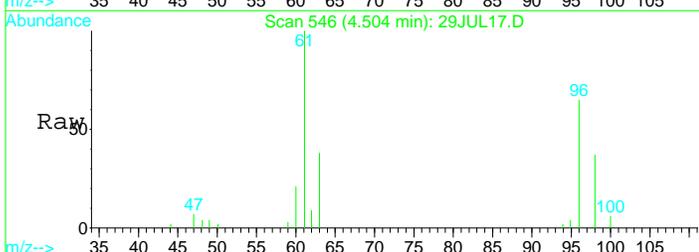
Tgt Ion	Resp	Lower	Upper
62	100		
64	33.6	39.3	72.9#





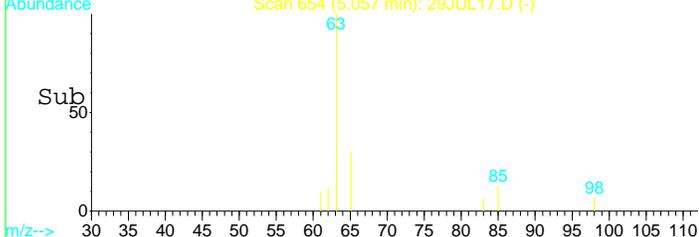
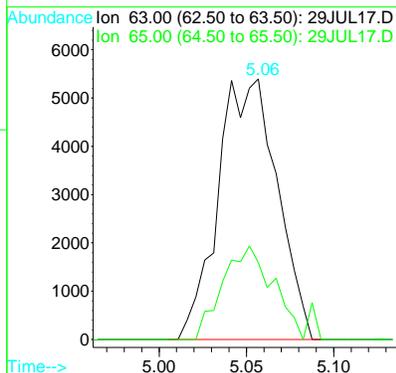
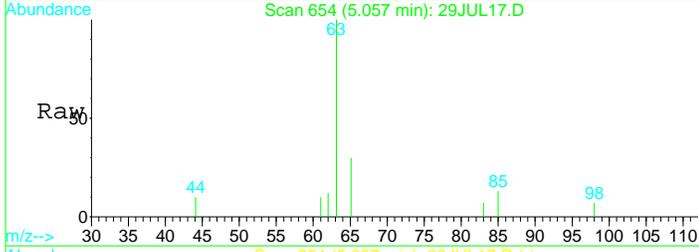
#12
 T-1,2-dichloroethene
 Concen: 2.93 ug/L
 RT: 4.50 min Scan# 546
 Delta R.T. 0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

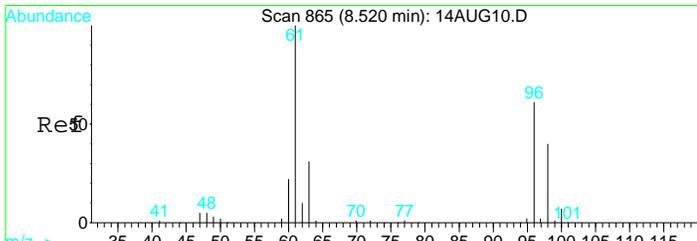
Tgt Ion	Resp	Lower	Upper
96	26039		
100			
61	178.5	129.4	240.4
98	67.6	41.5	77.1
63	59.1	39.3	73.1



#13
 1,1-Dichloroethane
 Concen: 0.67 ug/L
 RT: 5.06 min Scan# 654
 Delta R.T. 0.01 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

Tgt Ion	Resp	Lower	Upper
63	12714		
100			
65	30.5	20.8	38.6

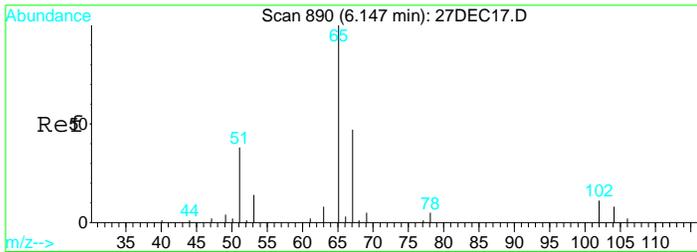
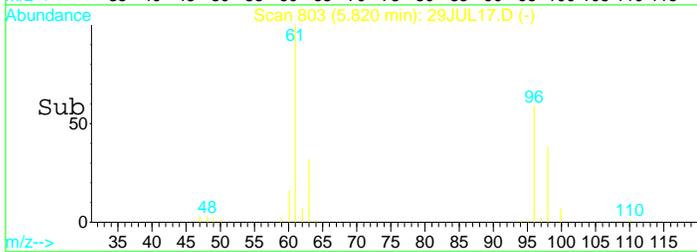
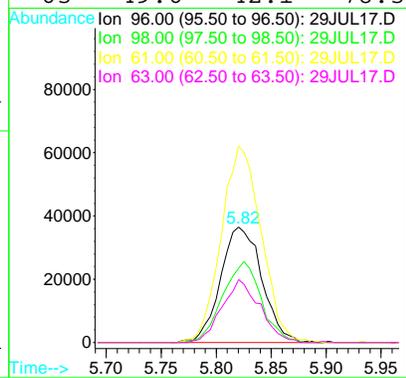
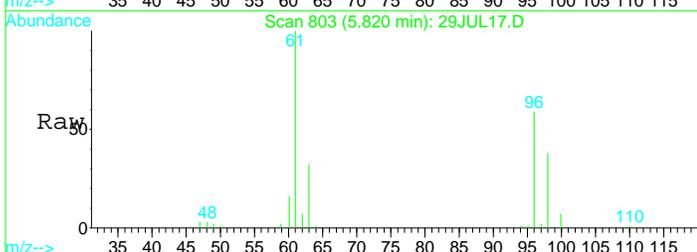




#15
 Cis-1,2-dichloroethene
 Concen: 10.33 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

Tgt Ion: 96 Resp: 95748

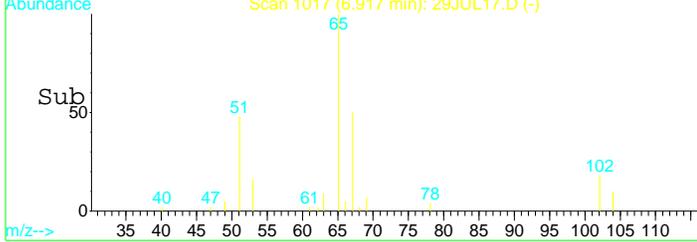
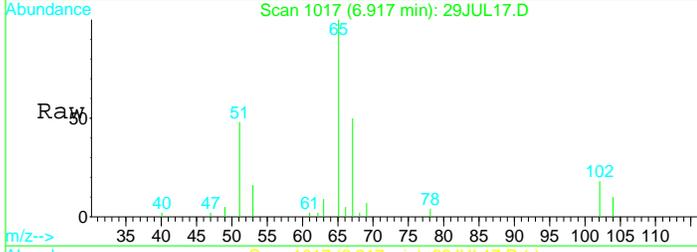
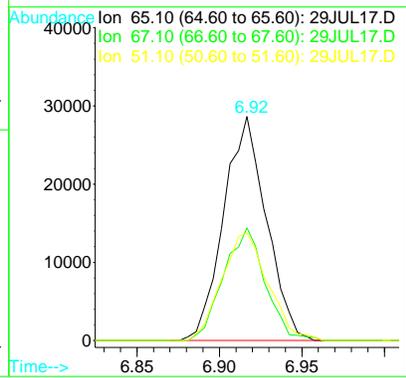
Ion	Ratio	Lower	Upper
96	100		
98	65.2	51.9	96.3
61	163.7	122.8	228.0
63	49.6	42.1	78.3

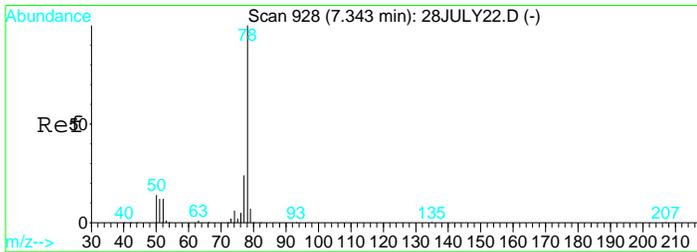


#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1017
 Delta R.T. 0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

Tgt Ion: 65 Resp: 51563

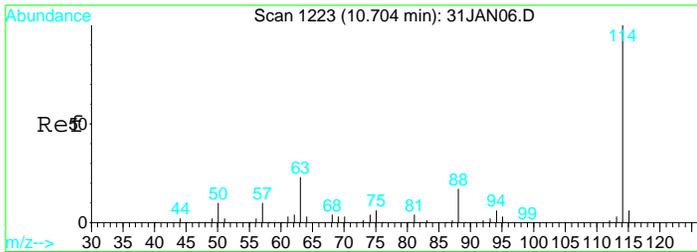
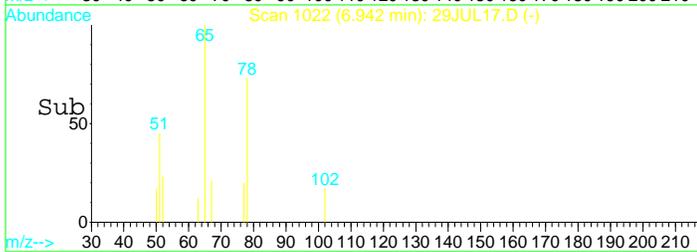
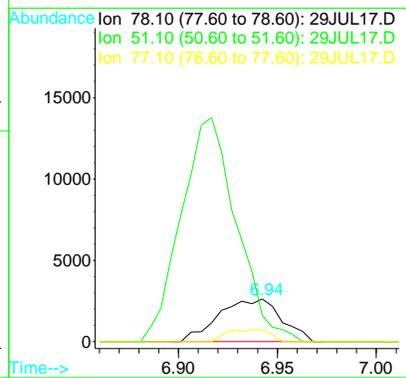
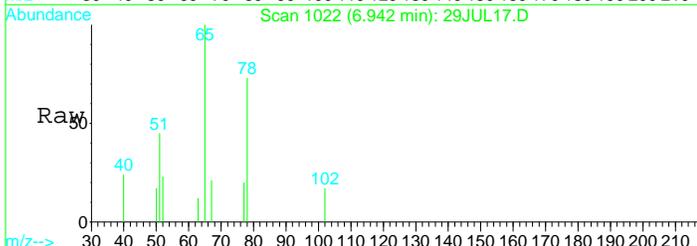
Ion	Ratio	Lower	Upper
65	100		
67	49.1	36.2	67.2
51	52.1	42.0	78.0





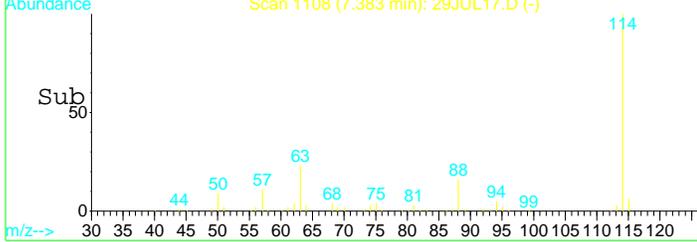
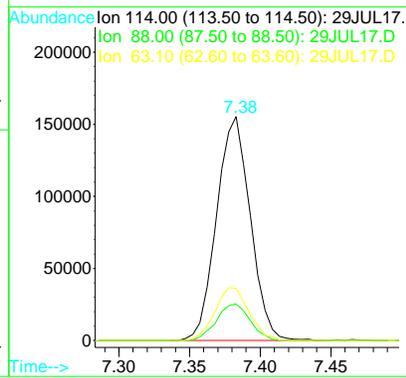
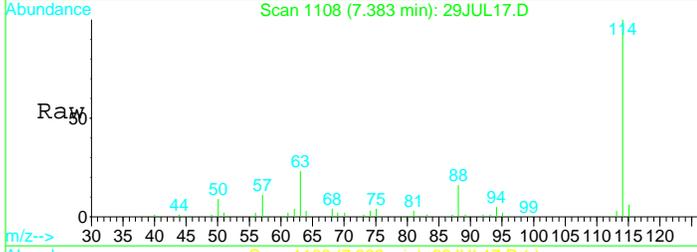
#23
 Benzene
 Concen: 0.16 ug/L
 RT: 6.94 min Scan# 1022
 Delta R.T. 0.01 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

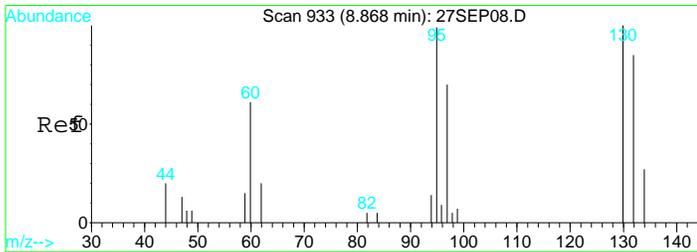
Tgt Ion	Resp	Lower	Upper
78	100		
51	464.1	114.8	213.2#
77	19.5	15.2	28.2



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. 0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

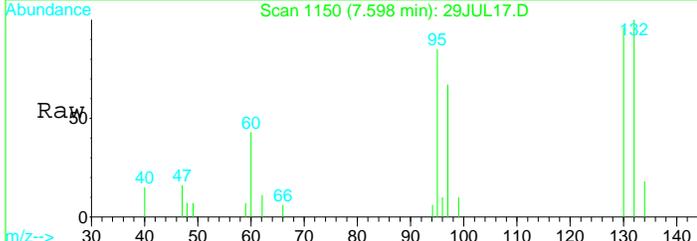
Tgt Ion	Resp	Lower	Upper
114	100		
88	16.3	11.7	21.7
63	23.9	16.7	30.9



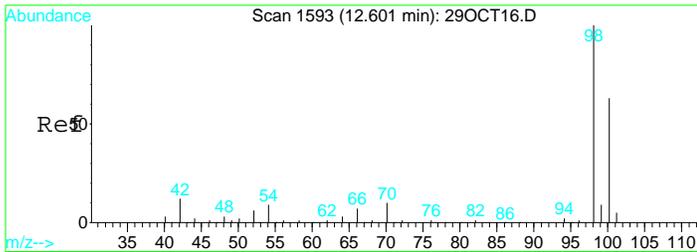
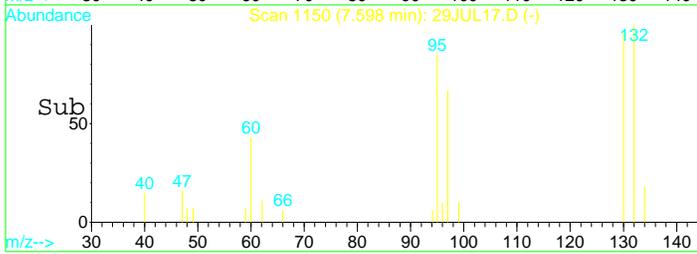
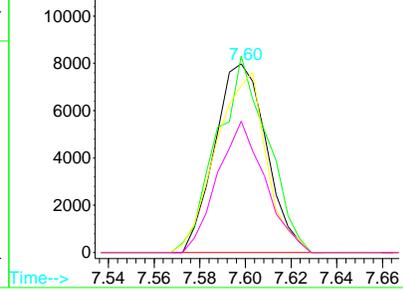


#25
 Trichloroethene
 Concen: 1.42 ug/L
 RT: 7.60 min Scan# 1150
 Delta R.T. 0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

Tgt Ion	Resp	Lower	Upper
130	100		
132	102.1	66.1	122.7
95	92.9	86.1	159.9
97	64.2	52.8	98.0

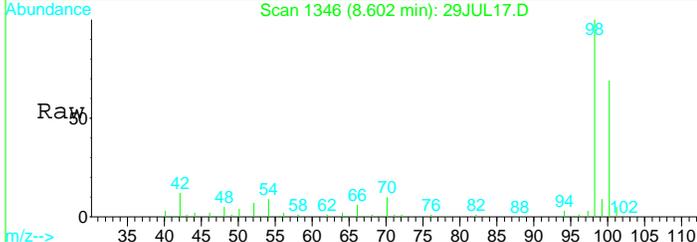


Abundance
 Ion 129.90 (129.40 to 130.40): 29JUL17.D
 Ion 131.90 (131.40 to 132.40): 29JUL17.D
 Ion 95.00 (94.50 to 95.50): 29JUL17.D
 Ion 97.00 (96.50 to 97.50): 29JUL17.D

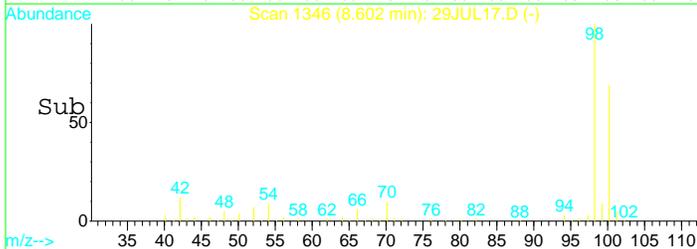
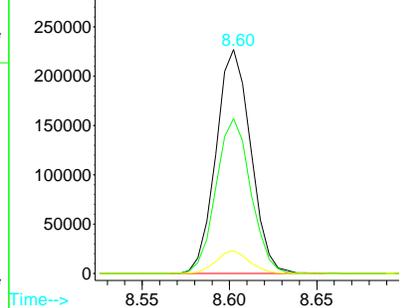


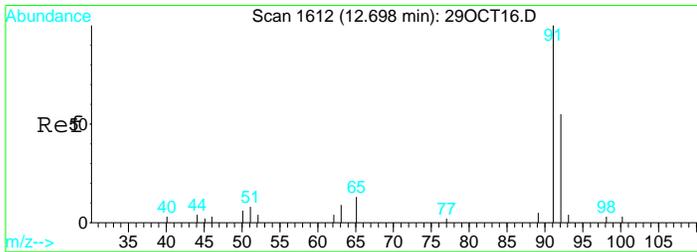
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

Tgt Ion	Resp	Lower	Upper
98	100		
100	69.1	49.7	92.3
70	9.8	7.3	13.7



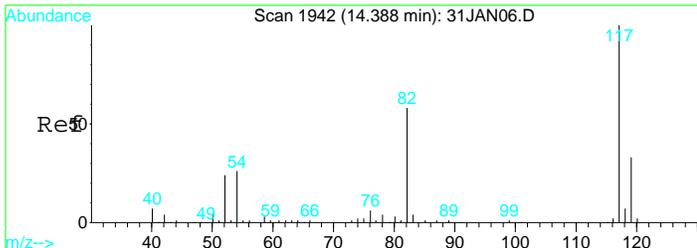
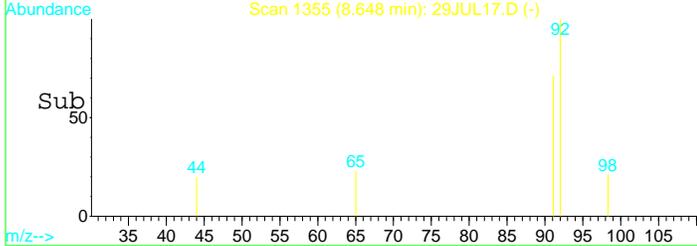
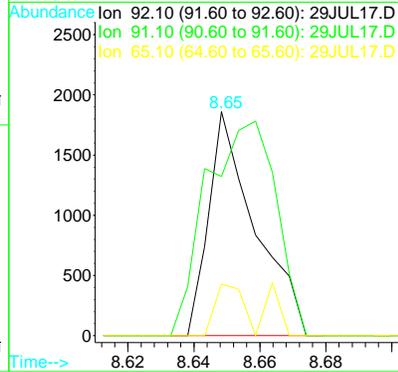
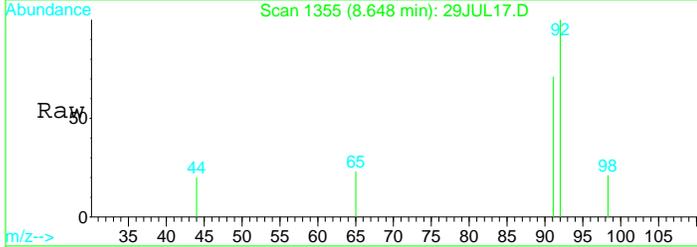
Abundance
 Ion 98.10 (97.60 to 98.60): 29JUL17.D
 Ion 100.10 (99.60 to 100.60): 29JUL17.D
 Ion 70.10 (69.60 to 70.60): 29JUL17.D





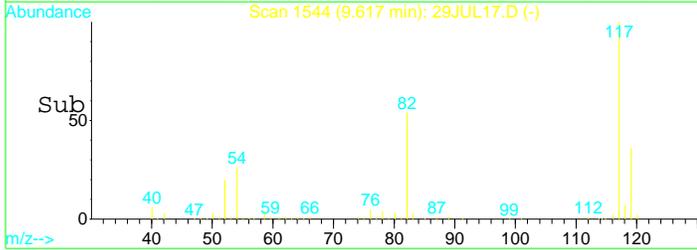
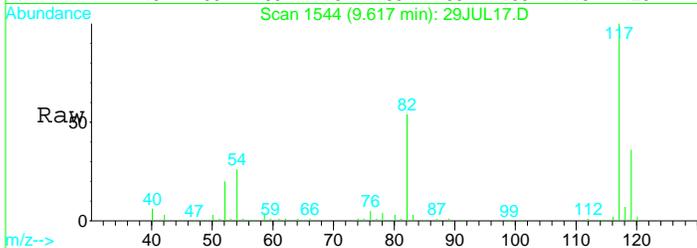
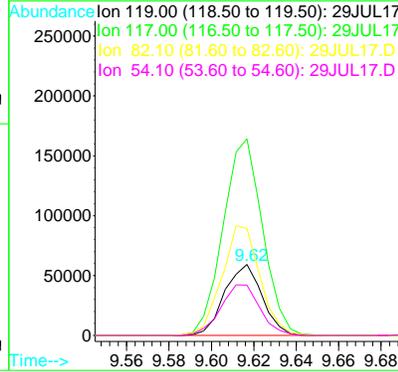
#32
 Toluene
 Concen: 0.08 ug/L
 RT: 8.65 min Scan# 1355
 Delta R.T. -0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

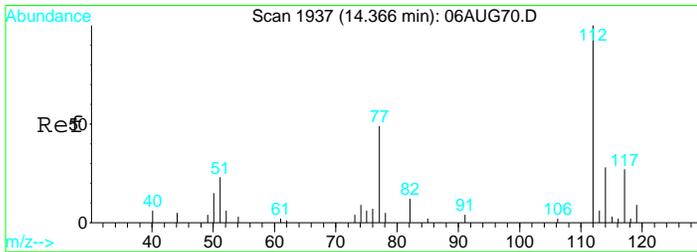
Tgt Ion	Resp	Lower	Upper
92	1811		
92	100		
91	143.9	122.6	227.6
65	13.8	16.5	30.7#



#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.62 min Scan# 1544
 Delta R.T. 0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

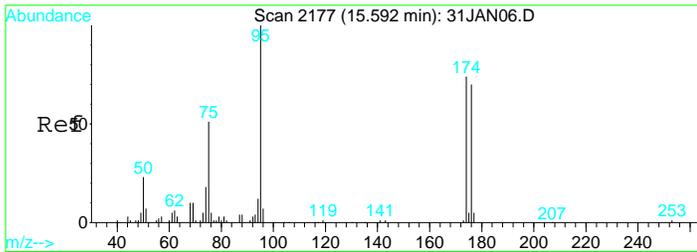
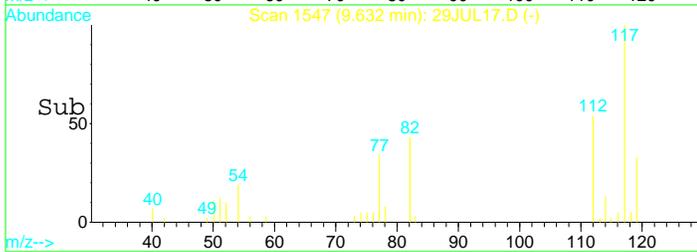
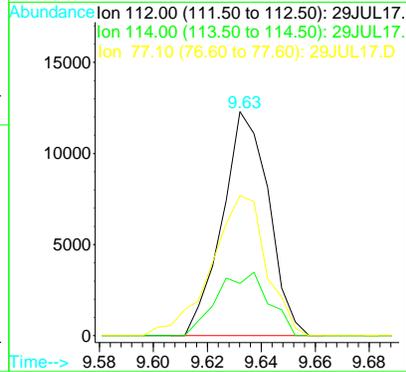
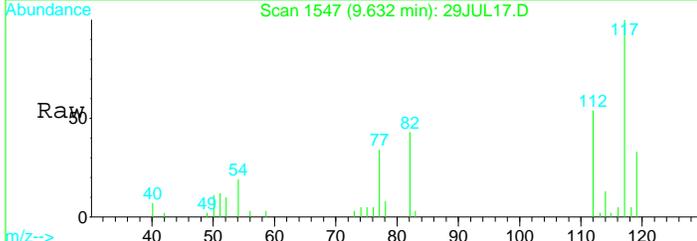
Tgt Ion	Resp	Lower	Upper
119	73062		
119	100		
117	290.8	214.5	398.4
82	156.6	117.7	218.7
54	74.5	55.2	102.4





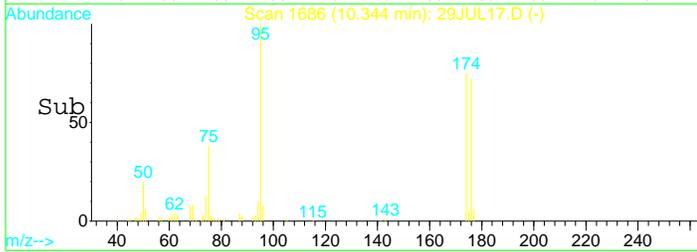
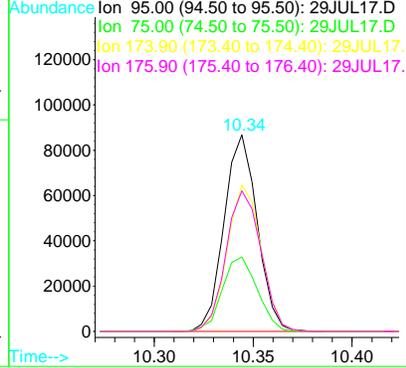
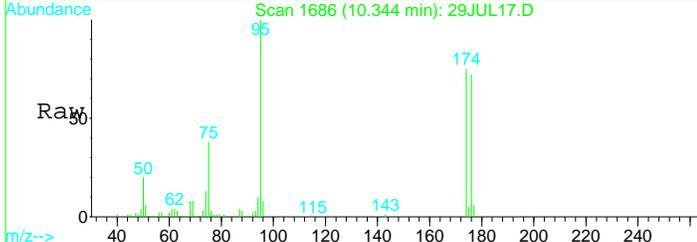
#40
 Chlorobenzene
 Concen: 0.61 ug/L
 RT: 9.63 min Scan# 1547
 Delta R.T. -0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

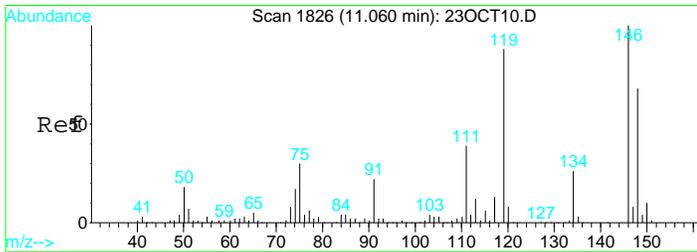
Tgt Ion	Resp	Lower	Upper
112	14683		
114	31.7	20.6	38.4
77	73.8	48.4	90.0



#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

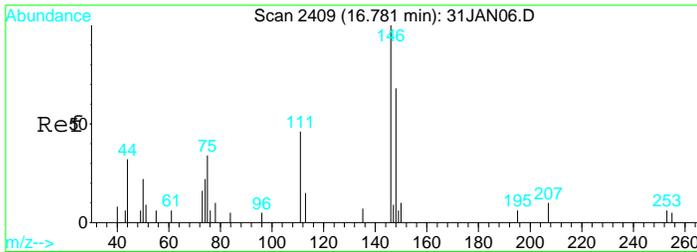
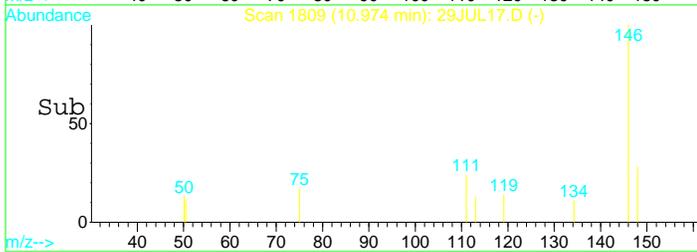
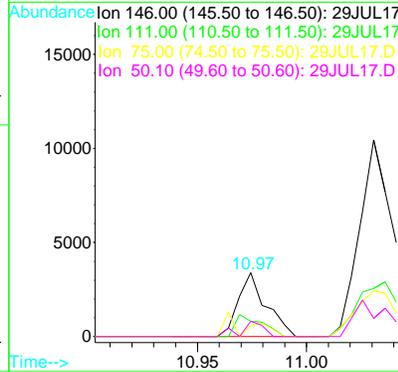
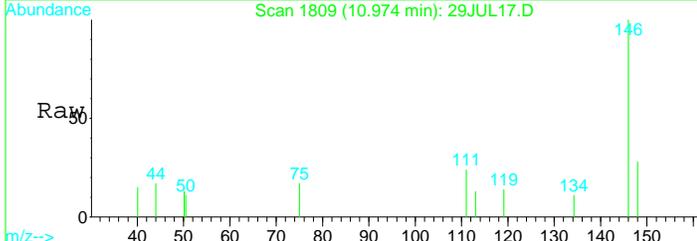
Tgt Ion	Resp	Lower	Upper
95	100916		
75	40.1	29.5	54.7
174	76.3	52.3	97.1
176	75.7	49.6	92.2





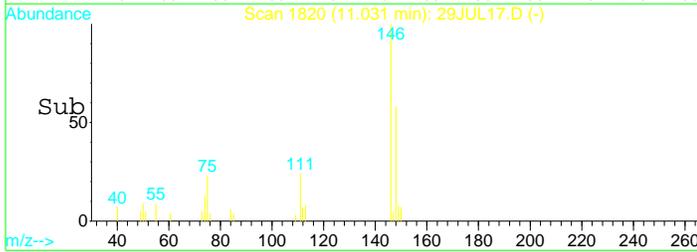
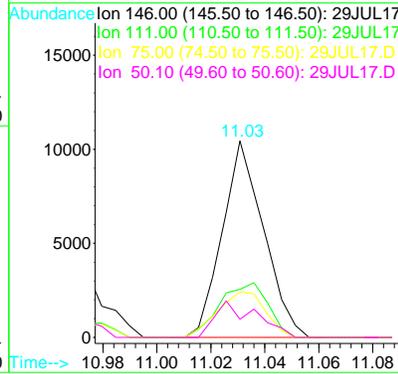
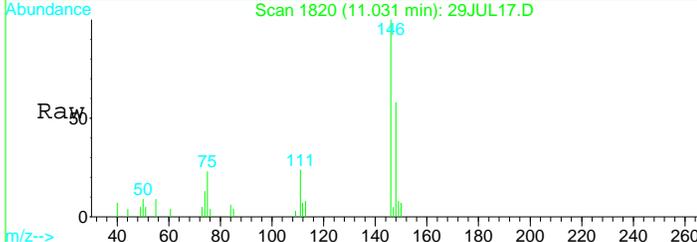
#60
 1,3-Dichlorobenzene
 Concen: 0.16 ug/L m
 RT: 10.97 min Scan# 1809
 Delta R.T. -0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

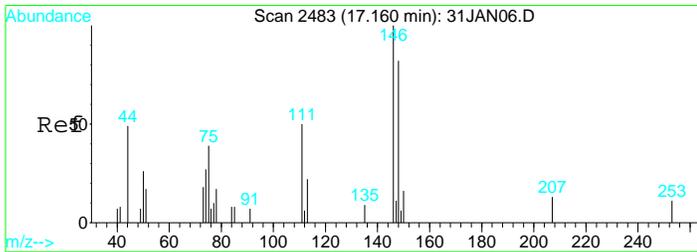
Tgt Ion	Resp	Lower	Upper
146	100		
111	120.5	28.8	53.6#
75	100.5	24.0	44.6#
50	68.5	14.6	27.0#



#61
 1,4-Dichlorobenzene
 Concen: 0.62 ug/L
 RT: 11.03 min Scan# 1820
 Delta R.T. -0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

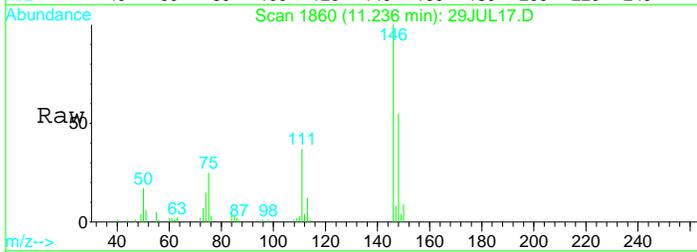
Tgt Ion	Resp	Lower	Upper
146	100		
111	32.4	28.1	52.3
75	27.0	20.3	37.7
50	18.4	16.0	29.6



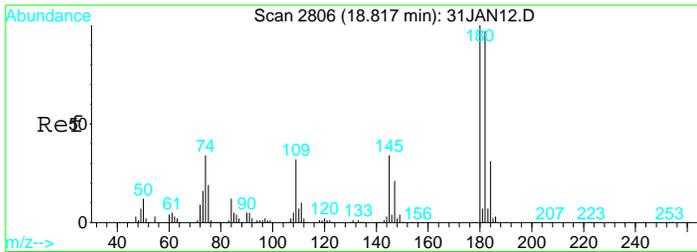
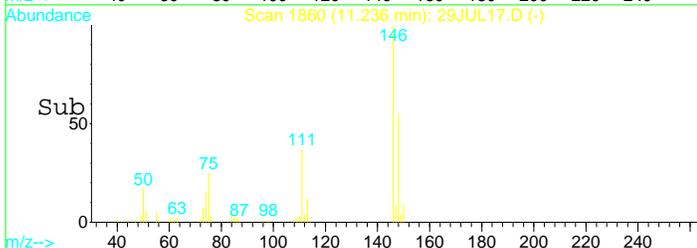
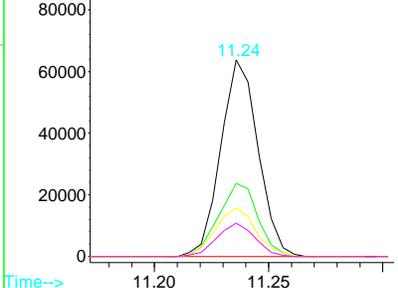


#63
 1,2-Dichlorobenzene
 Concen: 4.60 ug/L
 RT: 11.24 min Scan# 1860
 Delta R.T. -0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

Tgt Ion	Resp	Lower	Upper
146	100		
111	39.1	28.8	53.6
75	26.6	19.8	36.8
50	17.3	9.7	17.9

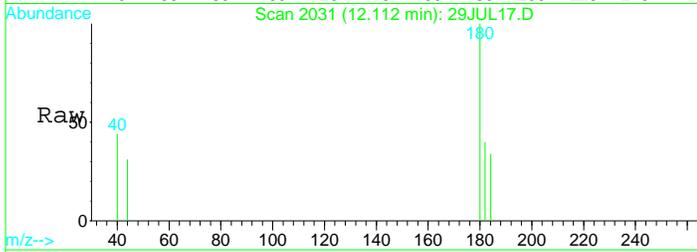


Abundance Ion 146.00 (145.50 to 146.50): 29JUL17.D
 Ion 111.00 (110.50 to 111.50): 29JUL17.D
 Ion 75.00 (74.50 to 75.50): 29JUL17.D
 Ion 50.10 (49.60 to 50.60): 29JUL17.D

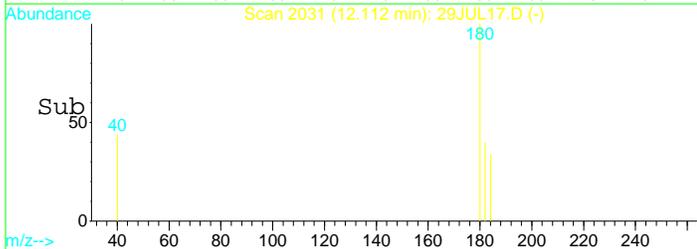
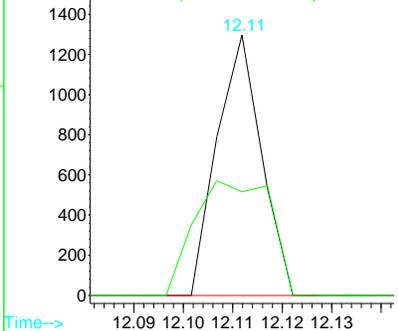


#66
 1,2,4-trichlorobenzene
 Concen: 0.09 ug/L
 RT: 12.11 min Scan# 2031
 Delta R.T. 0.00 min
 Lab File: 29JUL17.D
 Acq: 29 Jul 2017 8:40 pm

Tgt Ion	Resp	Lower	Upper
180	100		
182	75.8	65.4	121.4



Abundance Ion 179.90 (179.40 to 180.40): 29JUL17.D
 Ion 181.90 (181.40 to 182.40): 29JUL17.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL17.D Vial: 17
 Acq On : 29 Jul 2017 8:40 pm Operator: MGC
 Sample : 1720405-03 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:44 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	177436	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	258068	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	73062	10.00	ug/L	0.00
Target Compounds						Qvalue
4) 1,2-dichlorotrifluoroethan	3.29	67	44662	3.82	ug/L	# 74

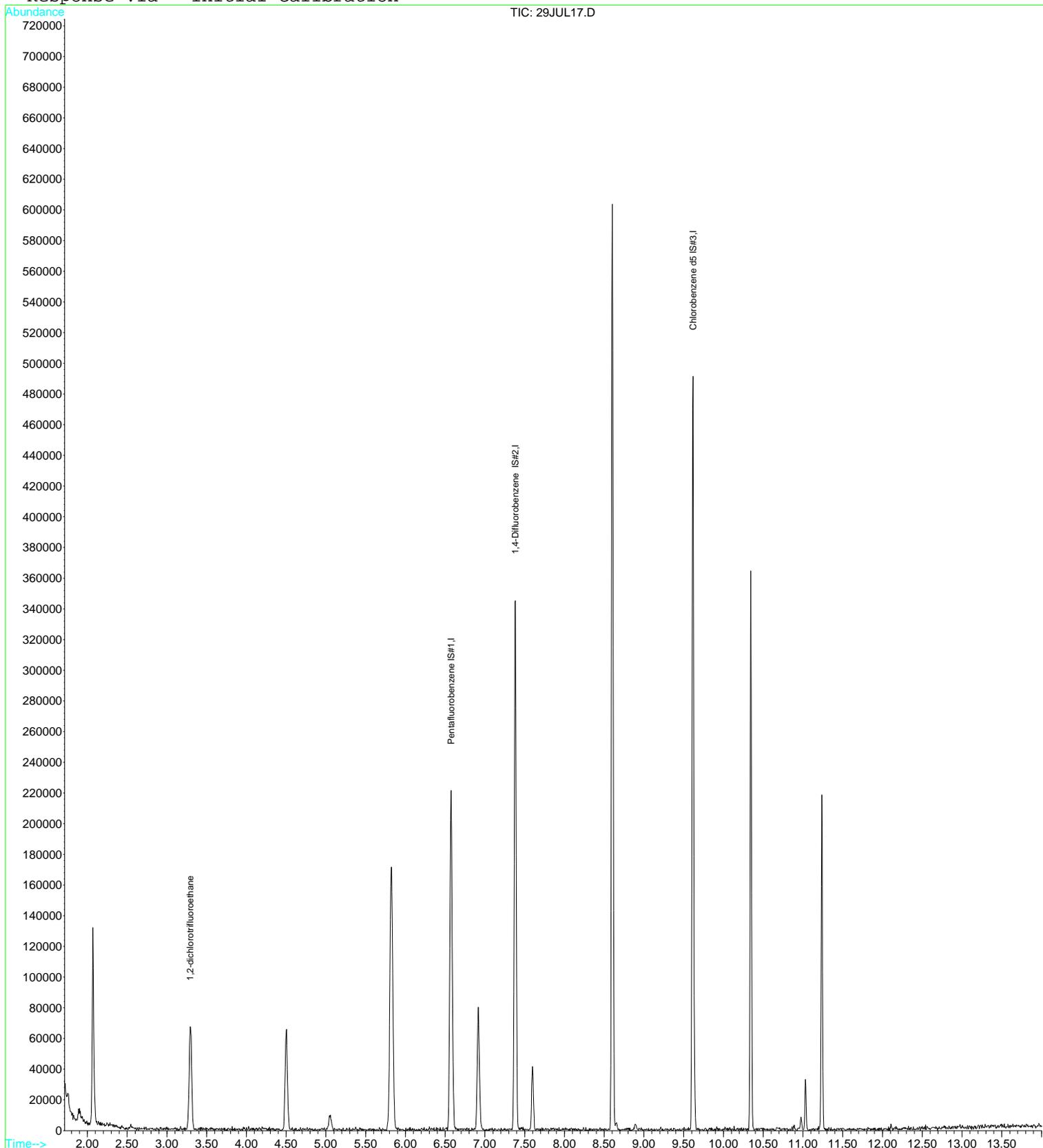
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL17.D
Acq On : 29 Jul 2017 8:40 pm
Sample : 1720405-03
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:44 2017

Vial: 17
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration

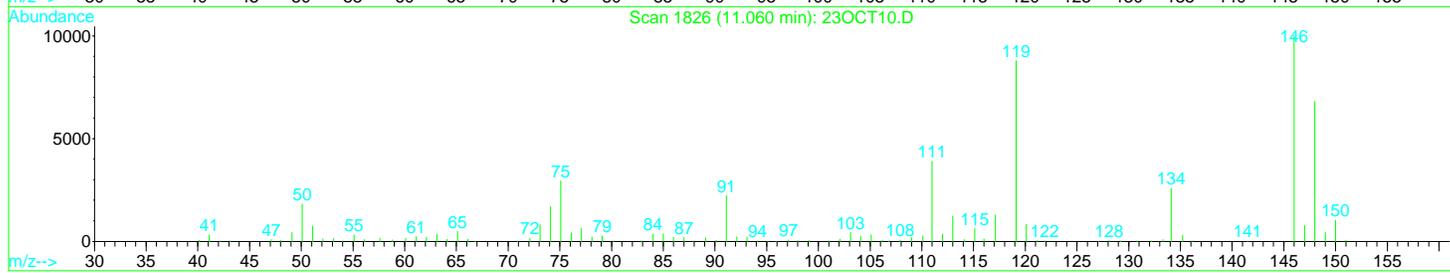
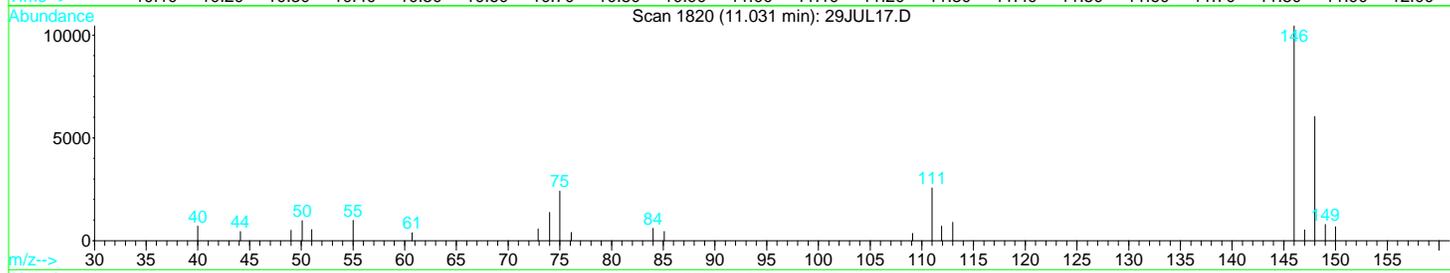
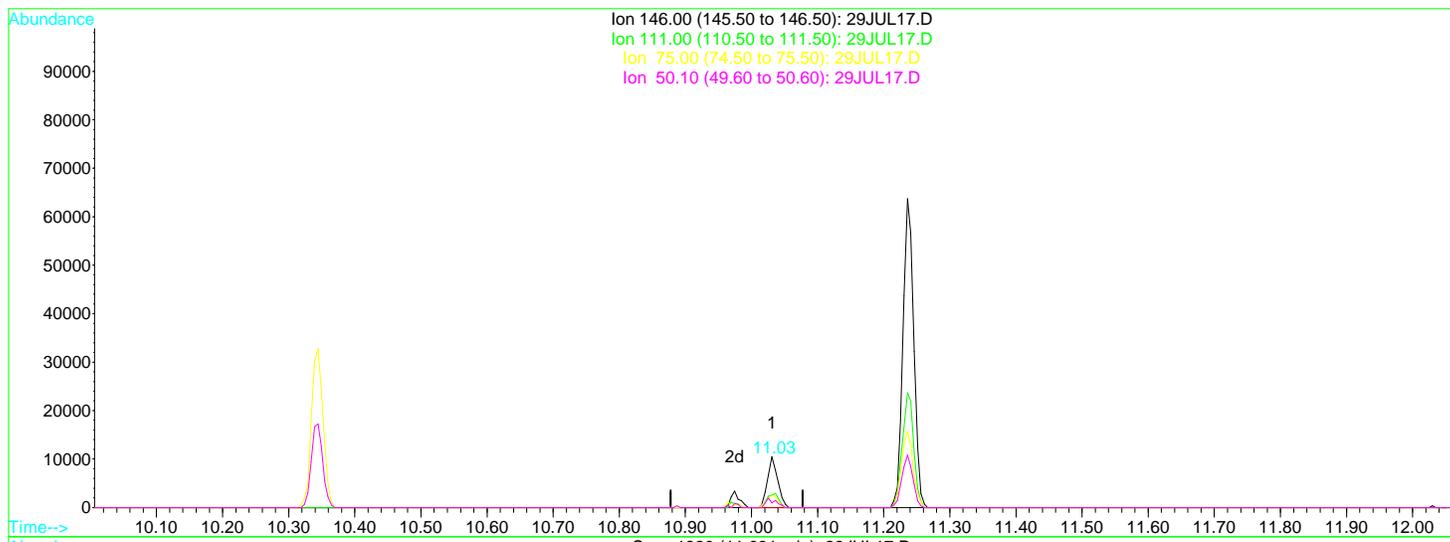


Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL17.D
 Acq On : 29 Jul 2017 8:40 pm
 Sample : 1720405-03
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:30 2017

Vial: 17
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Multiple Level Calibration



TIC: 29JUL17.D

(60) 1,3-Dichlorobenzene

11.03min 0.61ug/L

response 11121

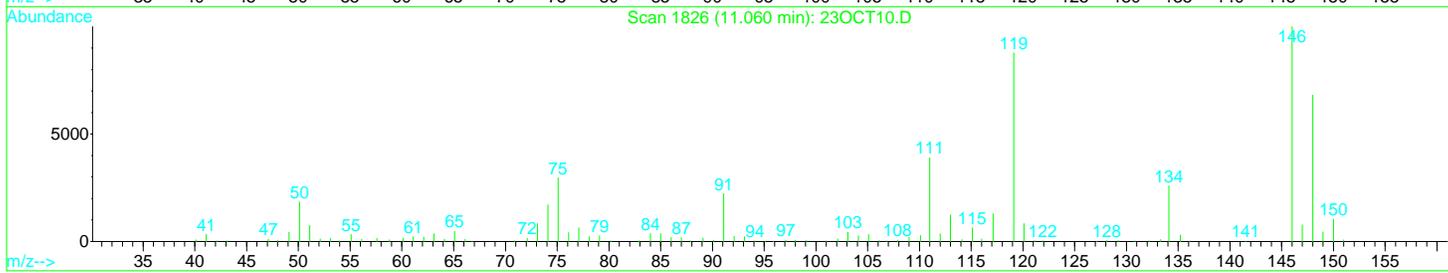
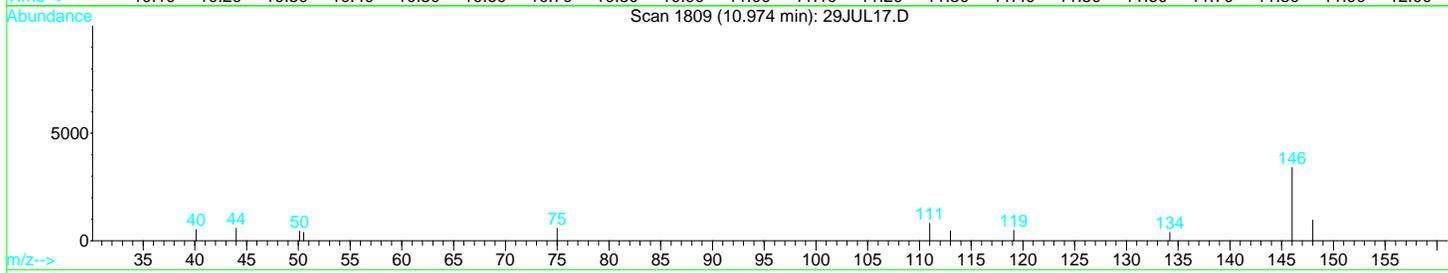
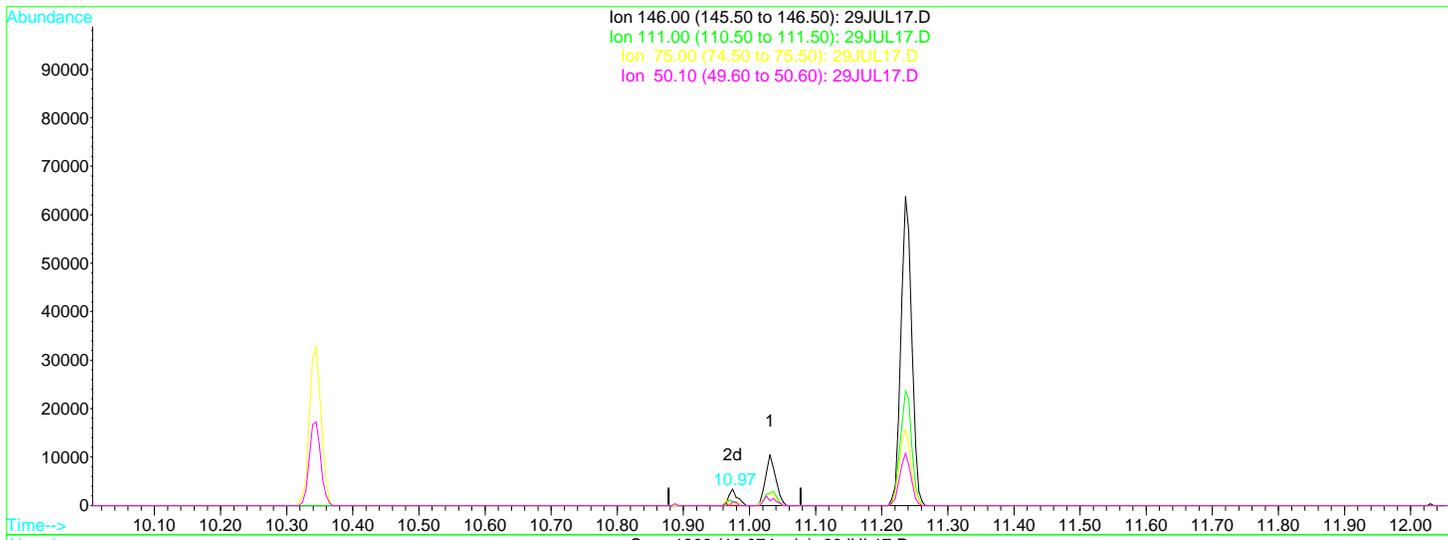
Ion	Exp%	Act%
146.00	100	100
111.00	41.20	32.38
75.00	34.30	27.01
50.10	20.80	18.41

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL17.D
 Acq On : 29 Jul 2017 8:40 pm
 Sample : 1720405-03
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:30 2017

Vial: 17
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Multiple Level Calibration



TIC: 29JUL17.D

(60) 1,3-Dichlorobenzene

10.97min 0.16ug/L m

response 2989

Ion	Exp%	Act%
146.00	100	100
111.00	41.20	120.48#
75.00	34.30	100.50#
50.10	20.80	68.48#

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL18.D
 Acq On : 29 Jul 2017 9:03 pm
 Sample : 1720405-04
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:31 2017

Vial: 18
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172883	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	253223	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	65879	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	55474	10.99	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	109.90%
31) Toluene d8 SMC#2	8.60	98	304542	9.74	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.40%
49) Bromofluorobenzene SMC#3	10.34	95	99002	10.06	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.60%

Target Compounds

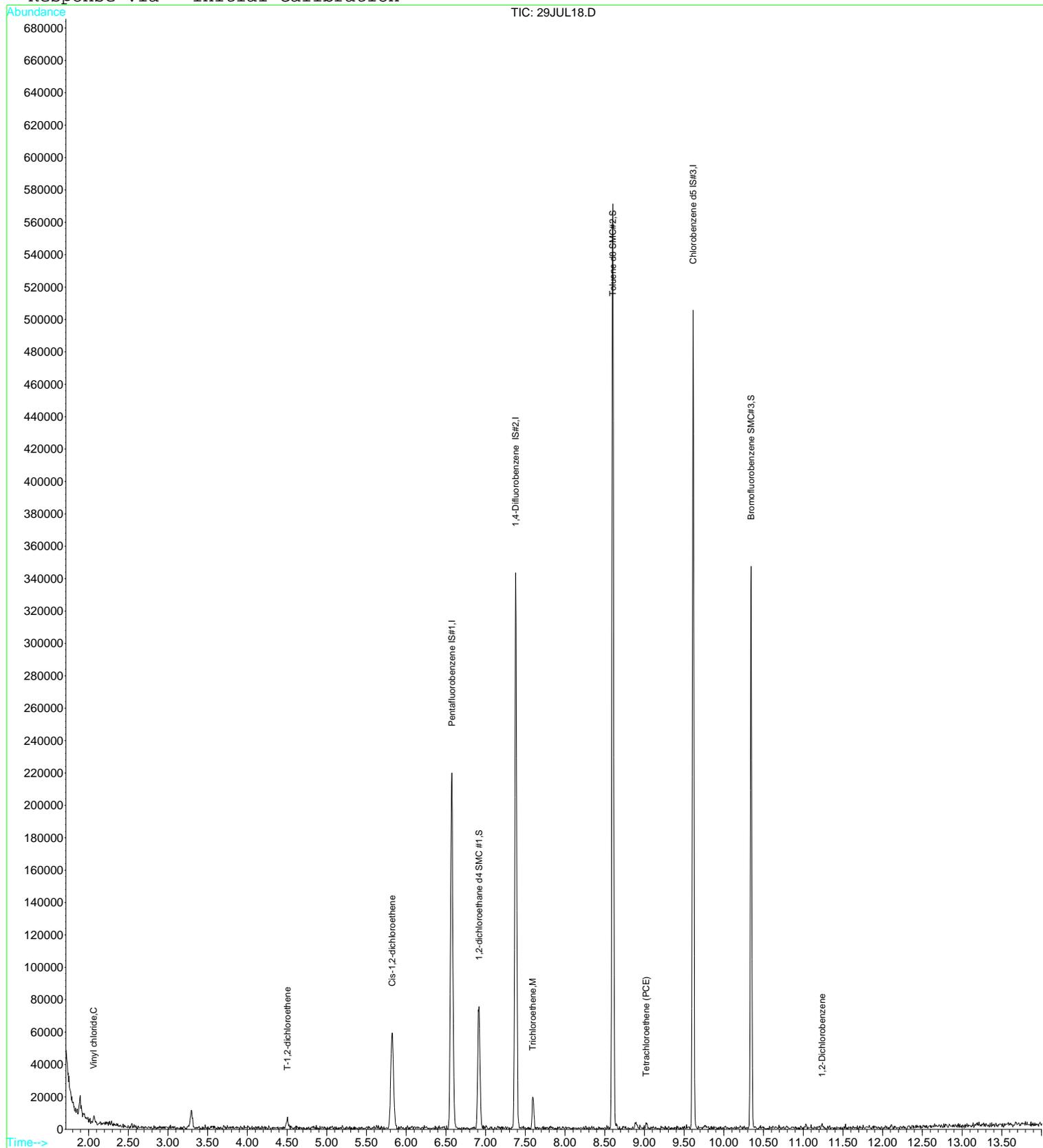
	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	2752	0.21	ug/L	88
12) T-1,2-dichloroethene	4.50	96	2419	0.28	ug/L #	93
15) Cis-1,2-dichloroethene	5.82	96	31941	3.54	ug/L	92
25) Trichloroethene	7.60	130	6054	0.70	ug/L	86
35) Tetrachloroethene (PCE)	9.02	166	1001	0.12	ug/L #	67
63) 1,2-Dichlorobenzene	11.23	146	1022	0.07	ug/L #	53

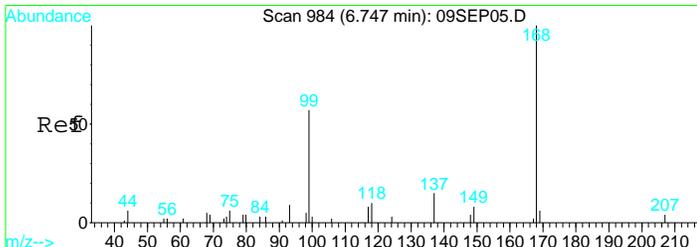
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL18.D
 Acq On : 29 Jul 2017 9:03 pm
 Sample : 1720405-04
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:31 2017

Vial: 18
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

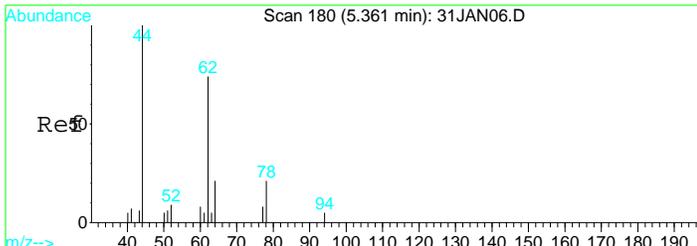
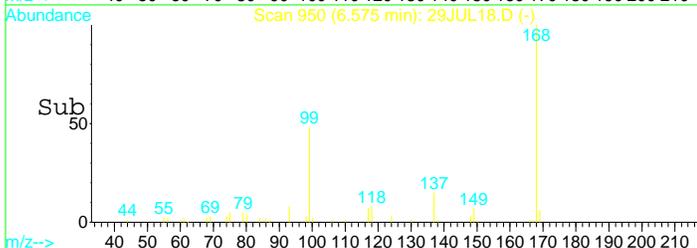
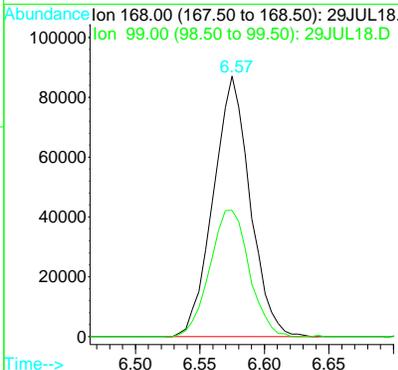
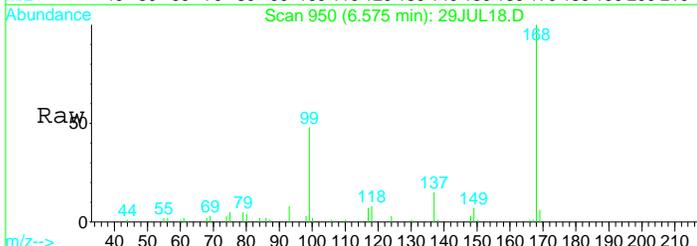
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





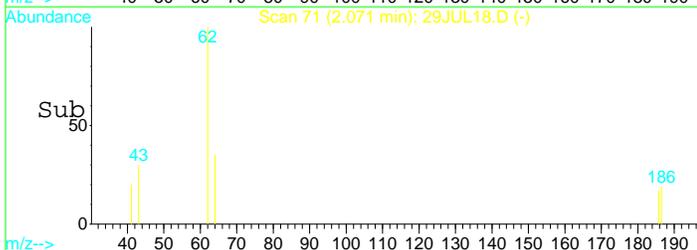
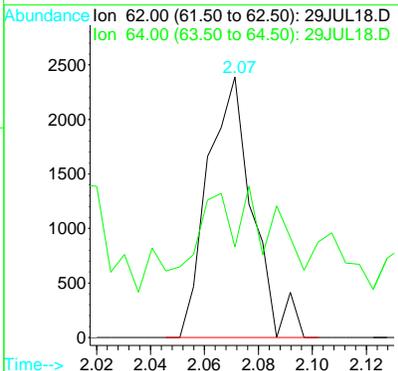
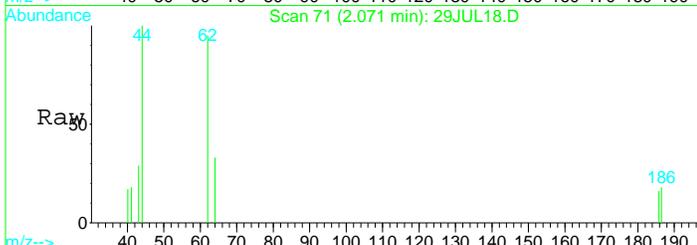
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

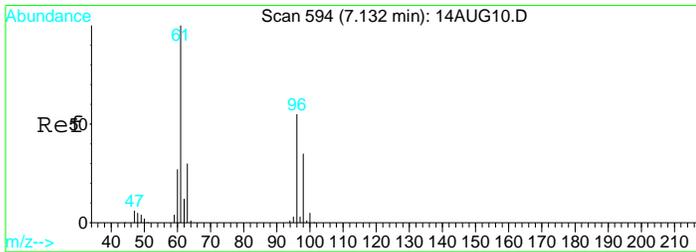
Tgt Ion	Resp	Lower	Upper
168	100		
99	51.7	38.7	71.9



#4
 Vinyl chloride
 Concen: 0.21 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

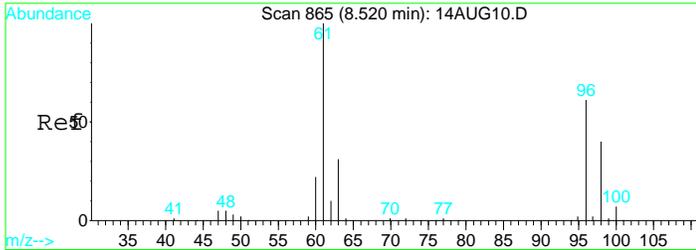
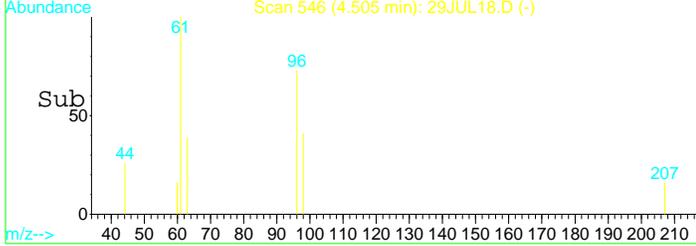
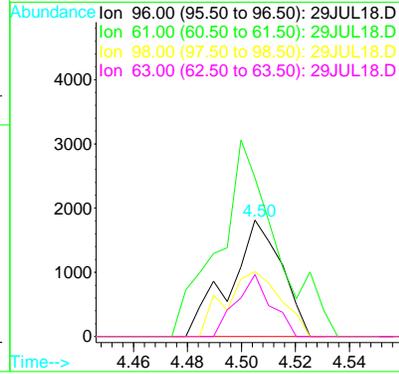
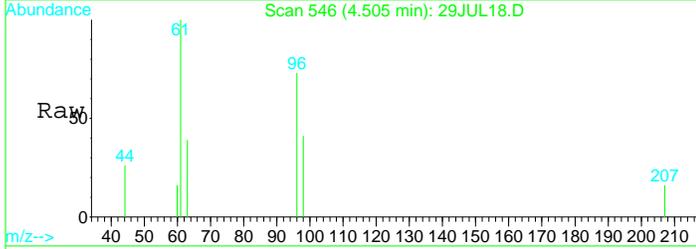
Tgt Ion	Resp	Lower	Upper
62	100		
64	47.6	39.3	72.9





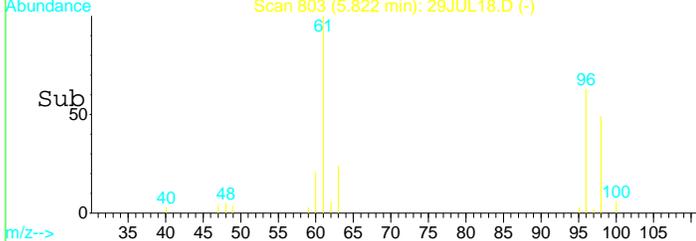
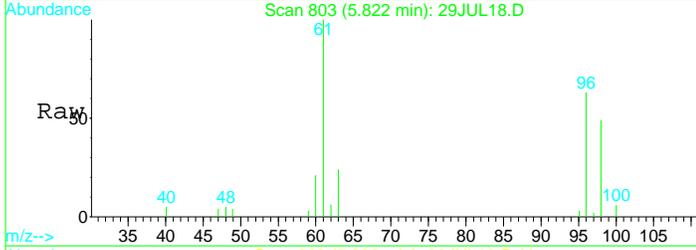
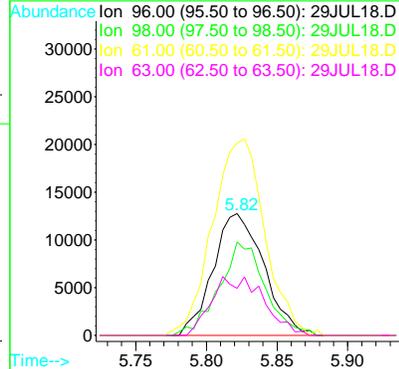
#12
 T-1,2-dichloroethene
 Concen: 0.28 ug/L
 RT: 4.50 min Scan# 546
 Delta R.T. 0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

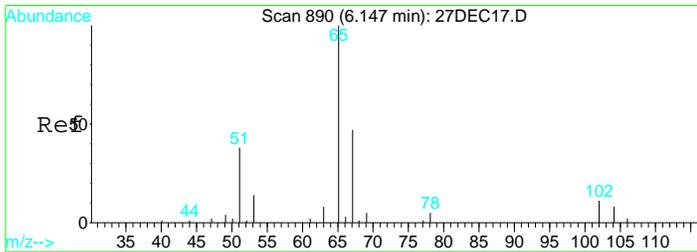
Tgt Ion	Resp	Lower	Upper
96	2419		
96	100		
61	188.2	129.4	240.4
98	59.5	41.5	77.1
63	36.0	39.3	73.1#



#15
 Cis-1,2-dichloroethene
 Concen: 3.54 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

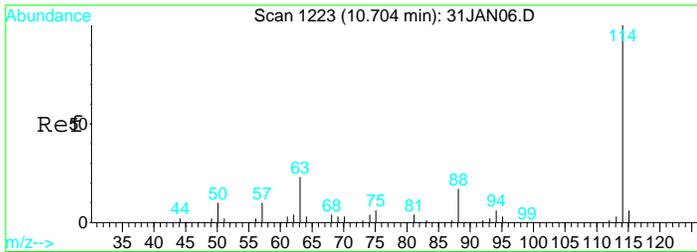
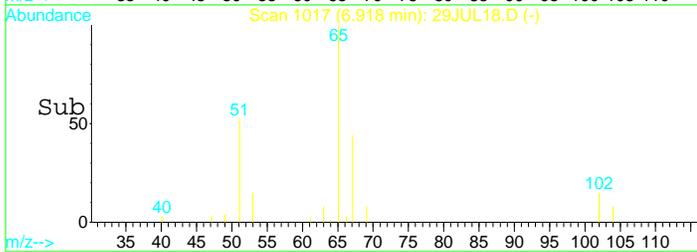
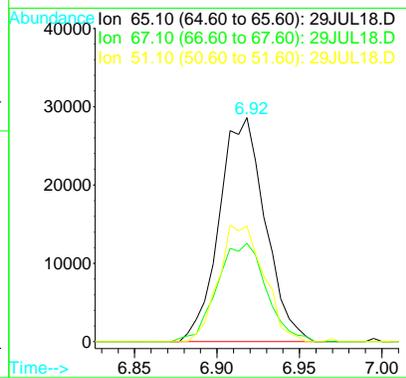
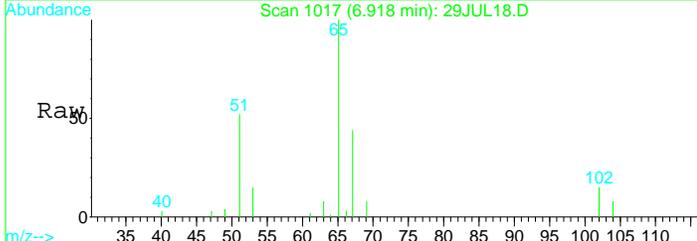
Tgt Ion	Resp	Lower	Upper
96	31941		
96	100		
98	69.3	51.9	96.3
61	165.0	122.8	228.0
63	49.2	42.1	78.3





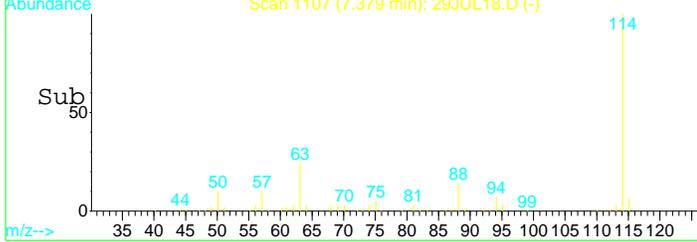
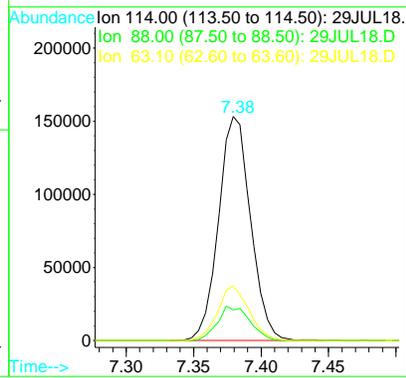
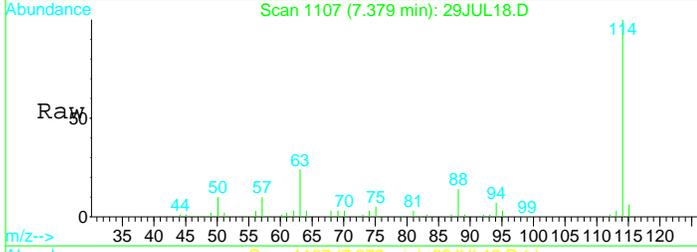
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1017
 Delta R.T. 0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

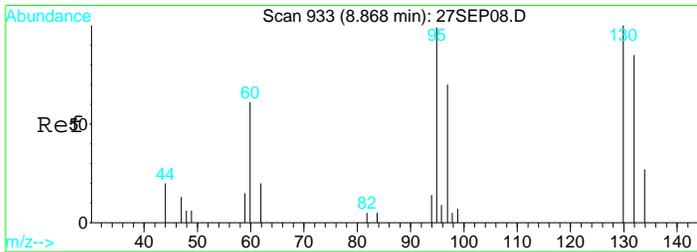
Tgt Ion	Resp	Lower	Upper
65	100		
67	46.9	36.2	67.2
51	51.1	42.0	78.0



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

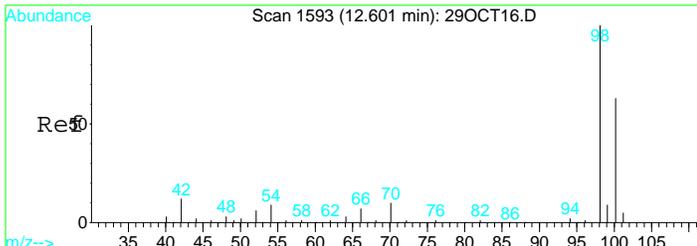
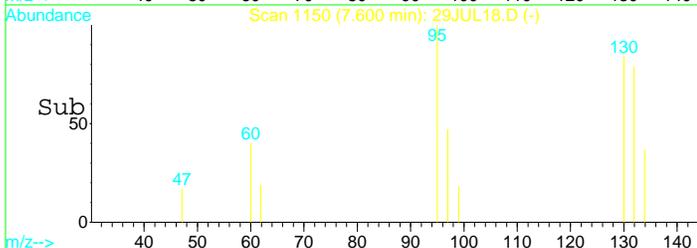
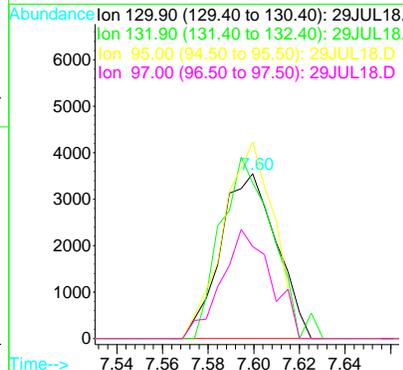
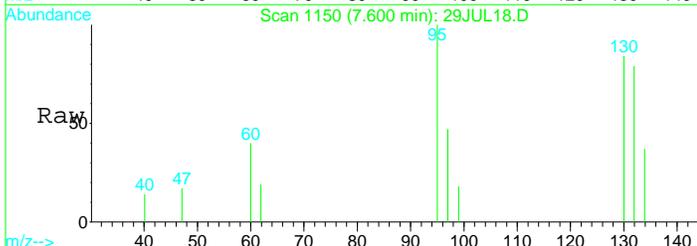
Tgt Ion	Resp	Lower	Upper
114	100		
88	15.4	11.7	21.7
63	23.8	16.7	30.9





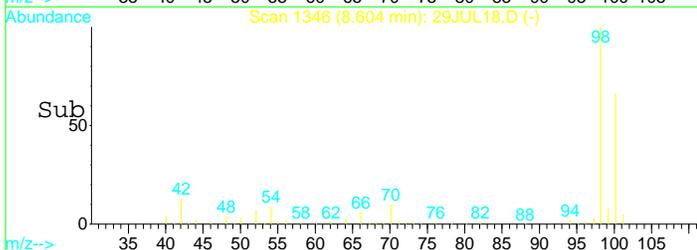
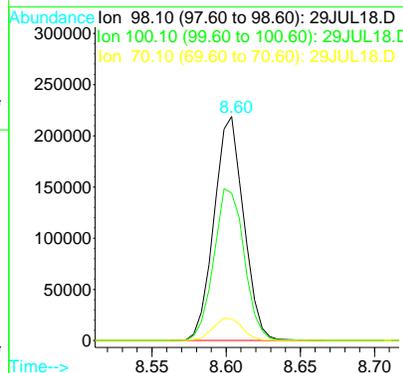
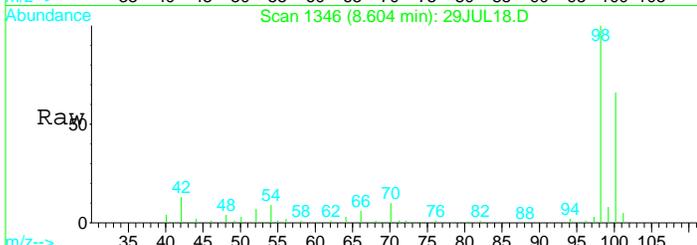
#25
 Trichloroethene
 Concen: 0.70 ug/L
 RT: 7.60 min Scan# 1150
 Delta R.T. 0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

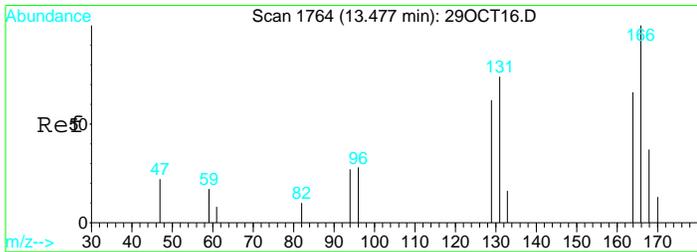
Tgt Ion	Resp	Lower	Upper
130	100		
132	101.9	66.1	122.7
95	107.2	86.1	159.9
97	58.3	52.8	98.0



#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

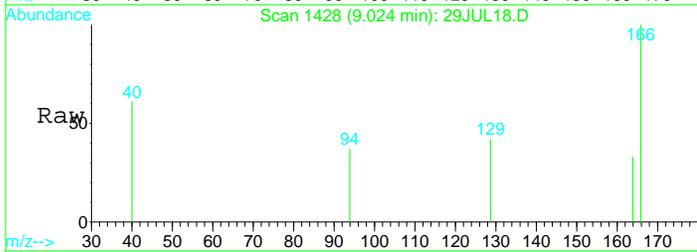
Tgt Ion	Resp	Lower	Upper
98	100		
100	69.6	49.7	92.3
70	10.0	7.3	13.7



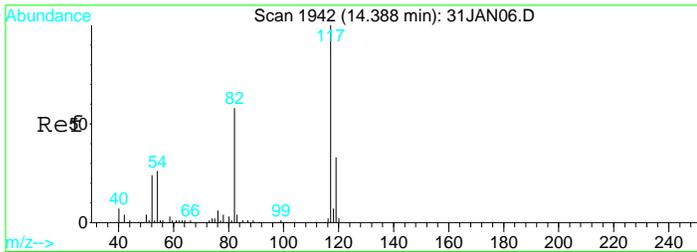
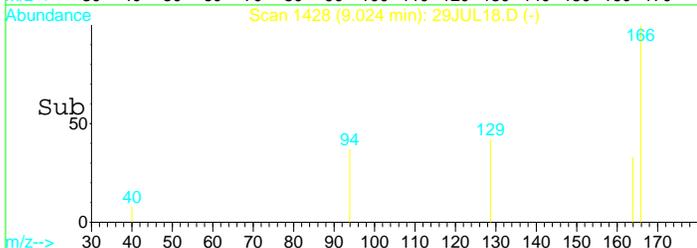
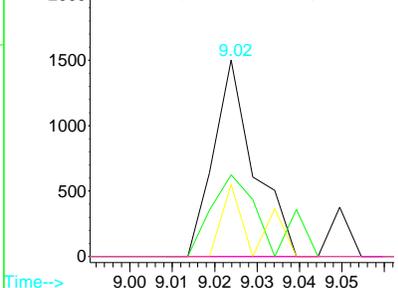


#35
 Tetrachloroethene (PCE)
 Concen: 0.12 ug/L
 RT: 9.02 min Scan# 1428
 Delta R.T. -0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

Tgt Ion	Resp	Lower	Upper
166	100		
129	54.4	54.3	100.8
94	28.2	24.1	44.7
168	0.0	28.6	53.0#



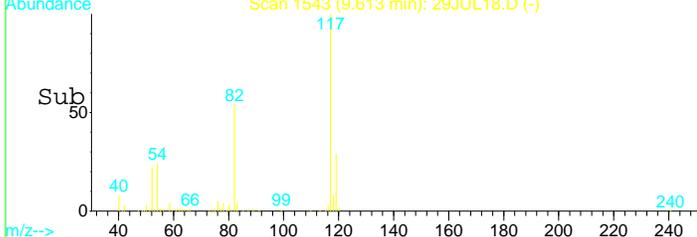
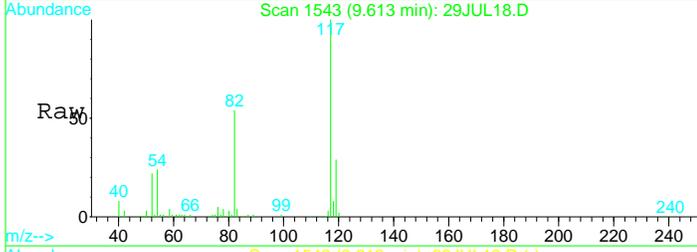
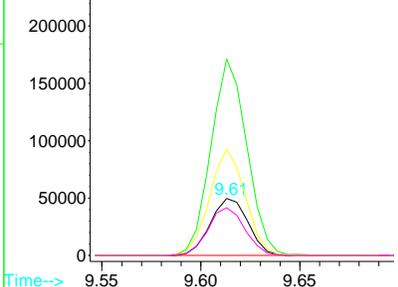
Abundance
 Ion 165.90 (165.40 to 166.40): 29JUL18.
 Ion 128.90 (128.40 to 129.40): 29JUL18.
 Ion 94.00 (93.50 to 94.50): 29JUL18.D
 Ion 167.90 (167.40 to 168.40): 29JUL18.

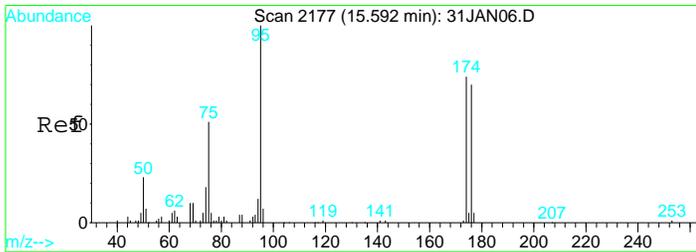


#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

Tgt Ion	Resp	Lower	Upper
119	100		
117	327.5	214.5	398.4
82	175.6	117.7	218.7
54	81.7	55.2	102.4

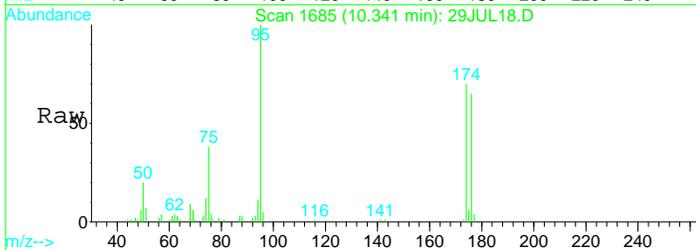
Abundance
 Ion 119.00 (118.50 to 119.50): 29JUL18.
 Ion 117.00 (116.50 to 117.50): 29JUL18.
 Ion 82.10 (81.60 to 82.60): 29JUL18.D
 Ion 54.10 (53.60 to 54.60): 29JUL18.D



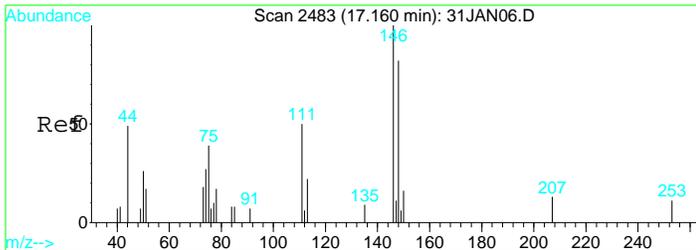
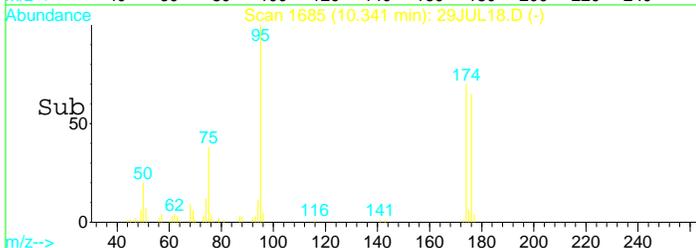
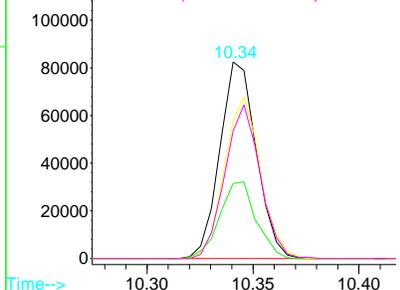


#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1685
 Delta R.T. -0.00 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

Tgt Ion	Resp	Lower	Upper
95	100		
75	39.0	29.5	54.7
174	80.7	52.3	97.1
176	75.6	49.6	92.2

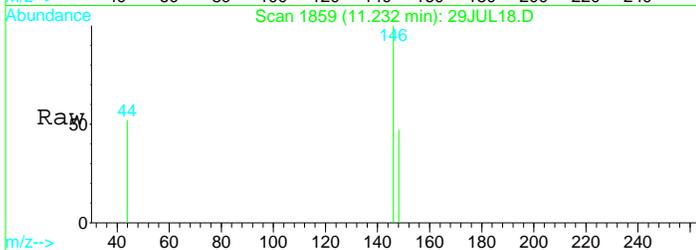


Abundance Ion 95.00 (94.50 to 95.50): 29JUL18.D
 Ion 75.00 (74.50 to 75.50): 29JUL18.D
 Ion 173.90 (173.40 to 174.40): 29JUL18.D
 Ion 175.90 (175.40 to 176.40): 29JUL18.D

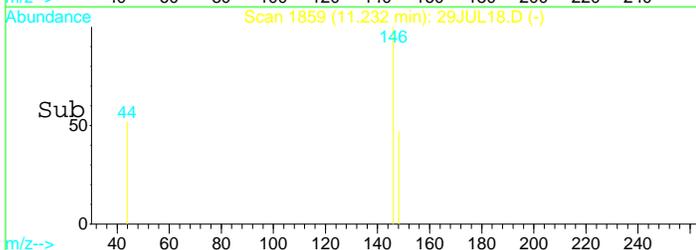
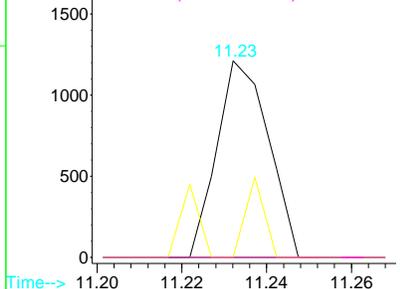


#63
 1,2-Dichlorobenzene
 Concen: 0.07 ug/L
 RT: 11.23 min Scan# 1859
 Delta R.T. -0.01 min
 Lab File: 29JUL18.D
 Acq: 29 Jul 2017 9:03 pm

Tgt Ion	Resp	Lower	Upper
146	100		
111	0.0	28.8	53.6#
75	14.9	19.8	36.8#
50	0.0	9.7	17.9#



Abundance Ion 146.00 (145.50 to 146.50): 29JUL18.D
 Ion 111.00 (110.50 to 111.50): 29JUL18.D
 Ion 75.00 (74.50 to 75.50): 29JUL18.D
 Ion 50.10 (49.60 to 50.60): 29JUL18.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL18.D Vial: 18
 Acq On : 29 Jul 2017 9:03 pm Operator: MGC
 Sample : 1720405-04 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:44 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

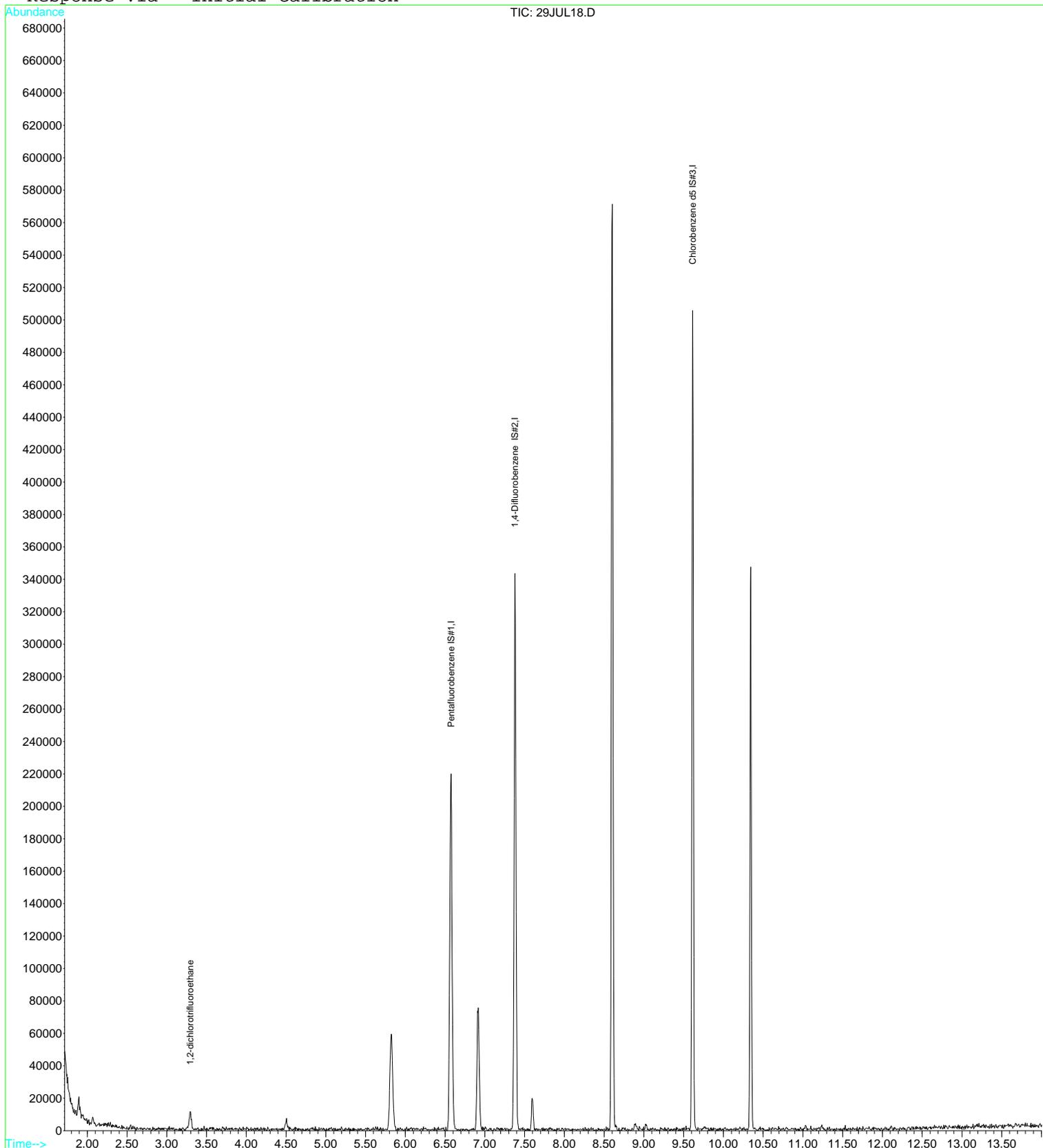
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172883	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	253223	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	65879	10.00	ug/L	0.00
Target Compounds						Qvalue
4) 1,2-dichlorotrifluoroethan	3.30	67	7194	0.63	ug/L	# 73

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL18.D
Acq On : 29 Jul 2017 9:03 pm
Sample : 1720405-04
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:44 2017

Vial: 18
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL20.D Vial: 20
 Acq On : 29 Jul 2017 9:49 pm Operator: MGC
 Sample : 1720405-05 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 30 5:32 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	169069	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	253732	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	67984	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	53104	10.75	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	107.50%
31) Toluene d8 SMC#2	8.60	98	300967	9.61	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.10%
49) Bromofluorobenzene SMC#3	10.34	95	102731	10.12	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.20%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	143665	11.34	ug/L #	68
12) T-1,2-dichloroethene	4.50	96	7385	0.87	ug/L #	83
13) 1,1-Dichloroethane	5.06	63	5025	0.28	ug/L #	76
15) Cis-1,2-dichloroethene	5.82	96	113829	12.89	ug/L	86
23) Benzene	6.93	78	12833	0.37	ug/L #	64
25) Trichloroethene	7.60	130	3702	0.42	ug/L	82
32) Toluene	8.65	92	2253	0.10	ug/L #	80
40) Chlorobenzene	9.63	112	53769	2.39	ug/L	92
60) 1,3-Dichlorobenzene	10.98	146	5793	0.34	ug/L	91
61) 1,4-Dichlorobenzene	11.03	146	21265	1.28	ug/L	94
63) 1,2-Dichlorobenzene	11.23	146	108527	7.40	ug/L	97
66) 1,2,4-trichlorobenzene	12.11	180	640	0.08	ug/L #	70

(#) = qualifier out of range (m) = manual integration

29JUL20.D 82605.M Sun Jul 30 05:40:47 2017

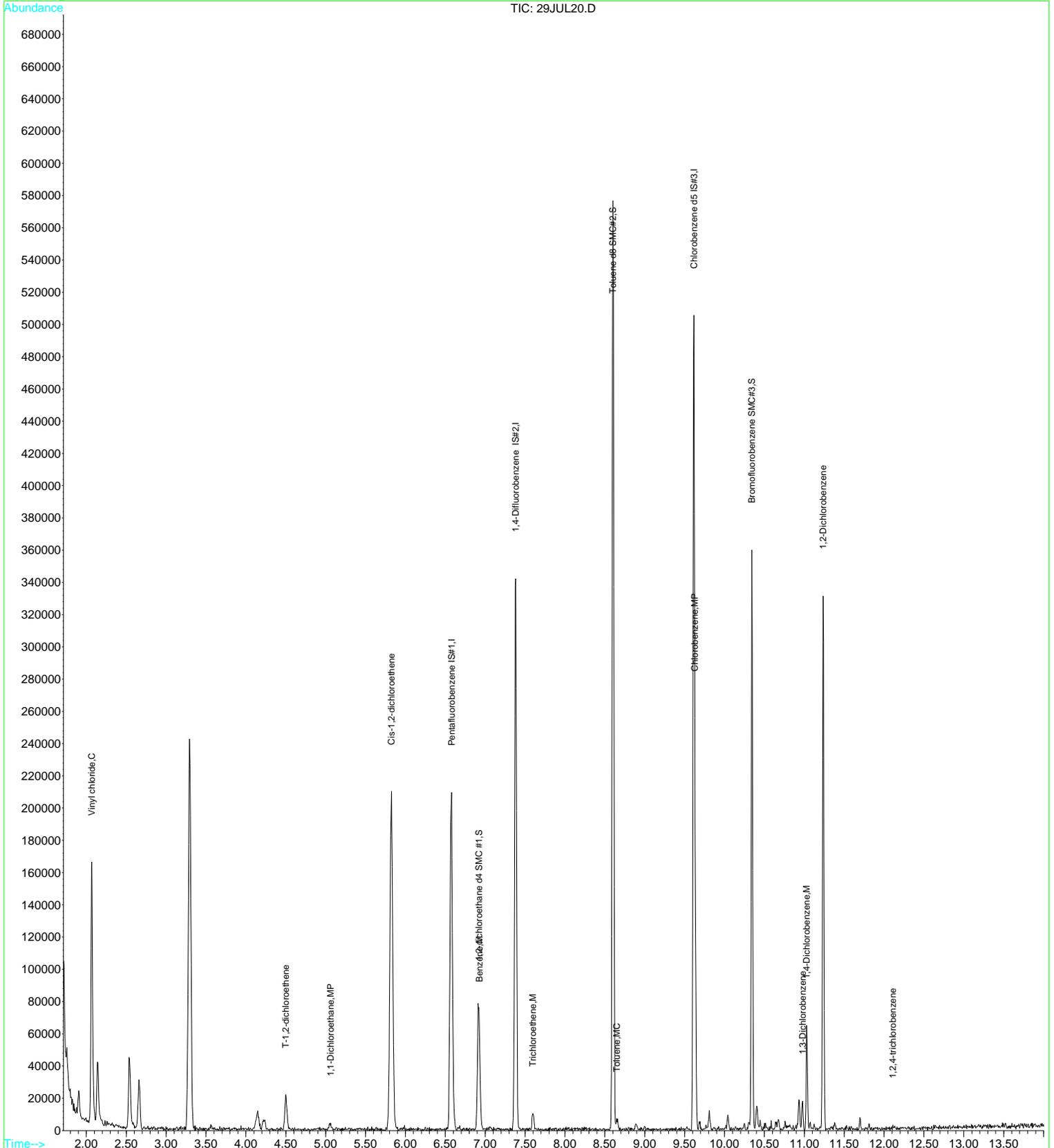
Quantitation Report

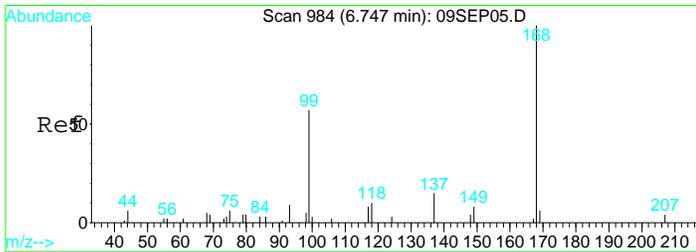
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL20.D
Acq On : 29 Jul 2017 9:49 pm
Sample : 1720405-05
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:32 2017

Vial: 20
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

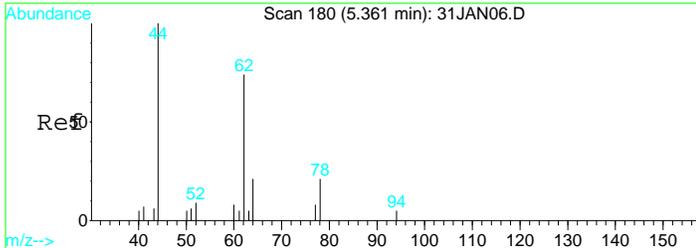
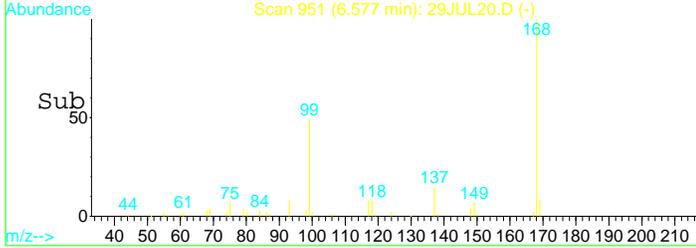
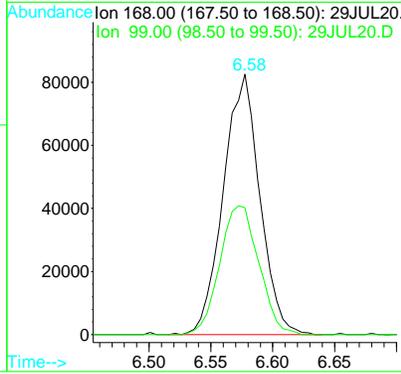
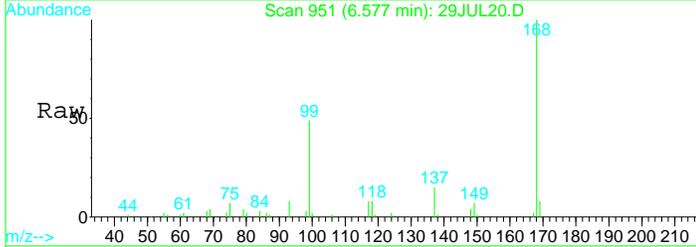
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





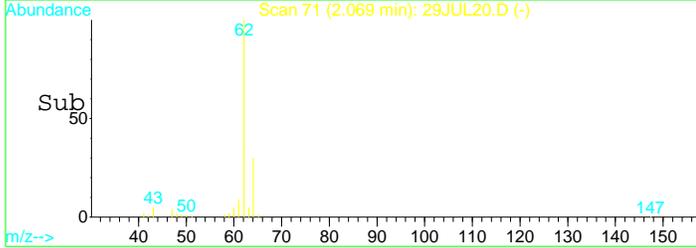
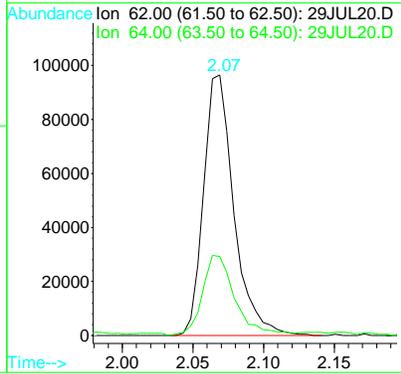
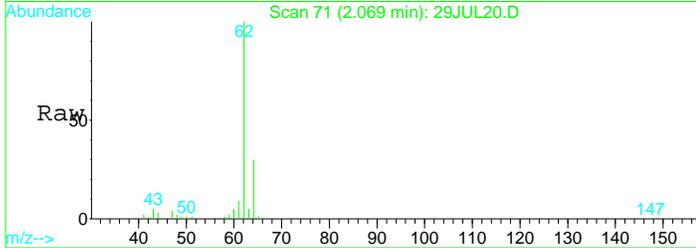
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.58 min Scan# 951
 Delta R.T. 0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

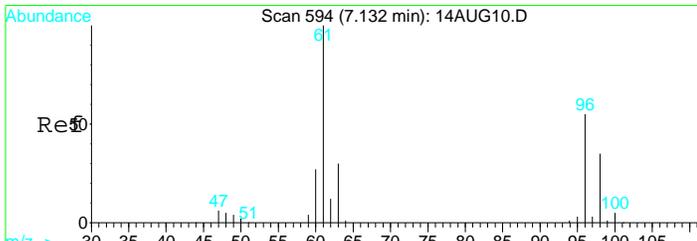
Tgt Ion: 168 Resp: 169069
 Ion Ratio Lower Upper
 168 100
 99 52.9 38.7 71.9



#4
 Vinyl chloride
 Concen: 11.34 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

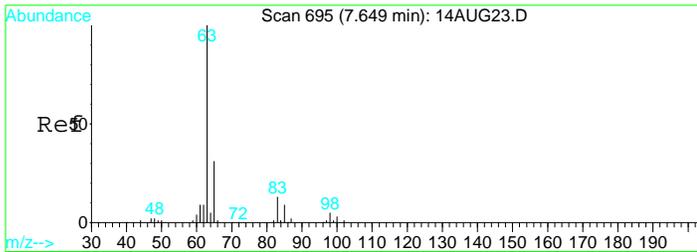
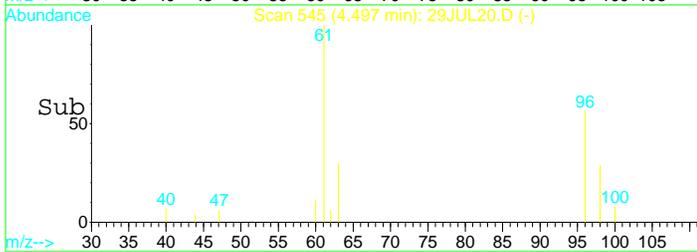
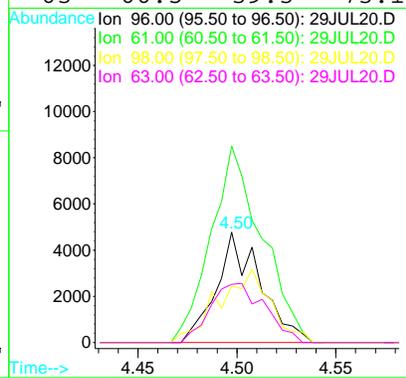
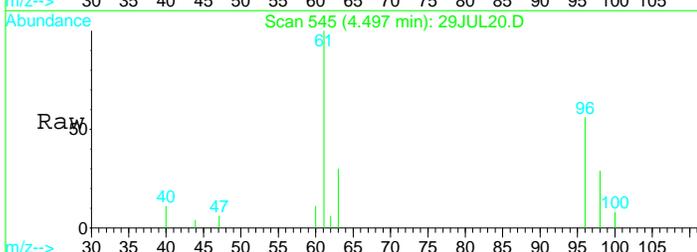
Tgt Ion: 62 Resp: 143665
 Ion Ratio Lower Upper
 62 100
 64 32.9 39.3 72.9#





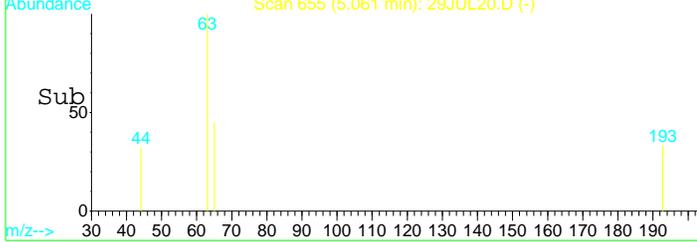
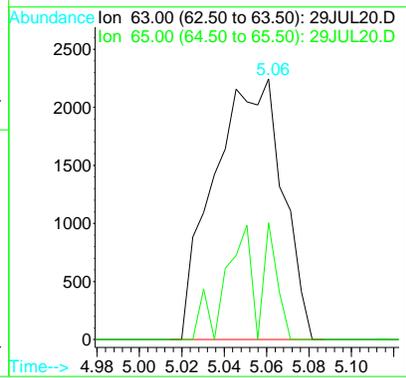
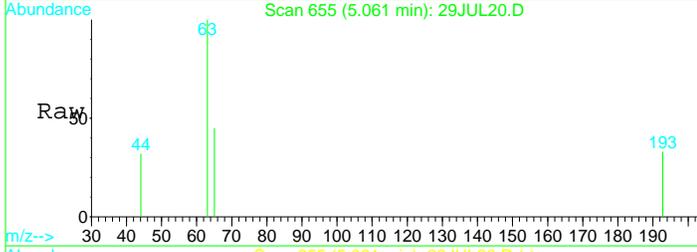
#12
 T-1,2-dichloroethene
 Concen: 0.87 ug/L
 RT: 4.50 min Scan# 545
 Delta R.T. -0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

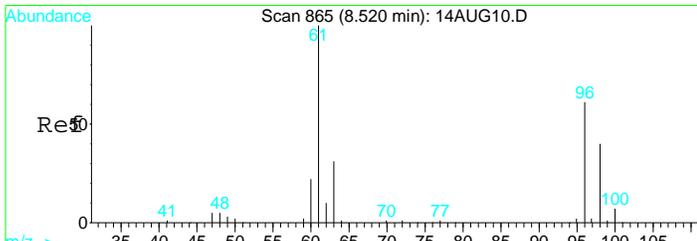
Tgt Ion	Resp	Lower	Upper
96	7385		
100			
61	206.1	129.4	240.4
98	78.3	41.5	77.1#
63	66.5	39.3	73.1



#13
 1,1-Dichloroethane
 Concen: 0.28 ug/L
 RT: 5.06 min Scan# 655
 Delta R.T. 0.01 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion	Resp	Lower	Upper
63	5025		
100			
65	16.9	20.8	38.6#

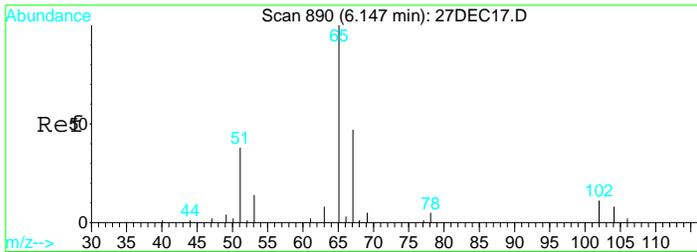
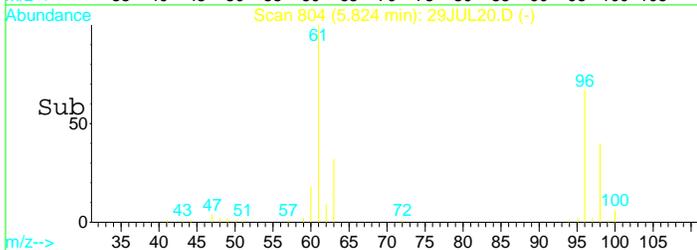
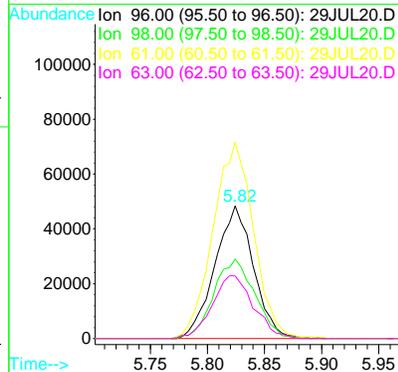
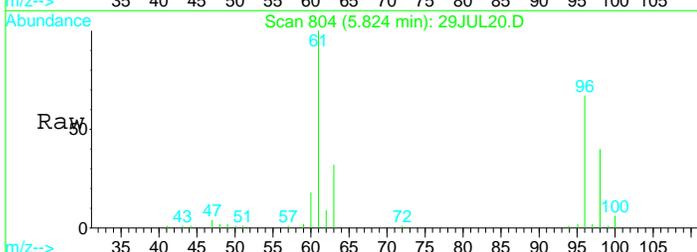




#15
 Cis-1,2-dichloroethene
 Concen: 12.89 ug/L
 RT: 5.82 min Scan# 804
 Delta R.T. 0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion: 96 Resp: 113829

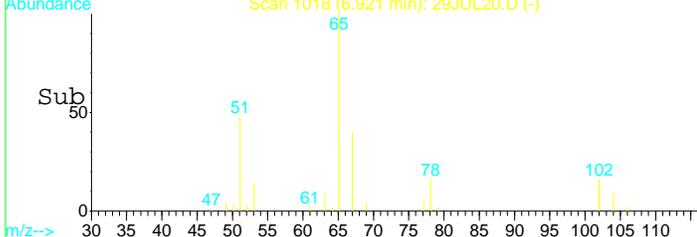
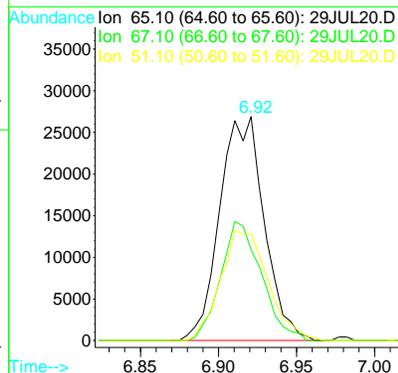
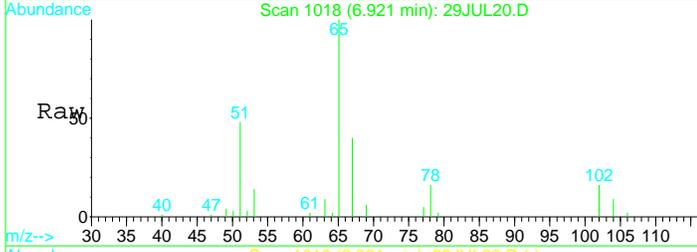
Ion	Ratio	Lower	Upper
96	100		
98	63.5	51.9	96.3
61	155.4	122.8	228.0
63	50.5	42.1	78.3

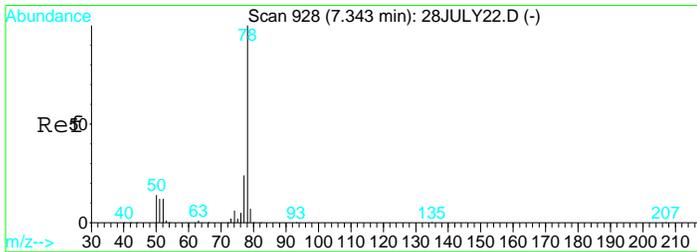


#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1018
 Delta R.T. 0.01 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion: 65 Resp: 53104

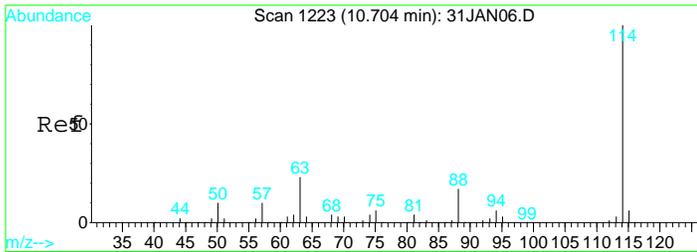
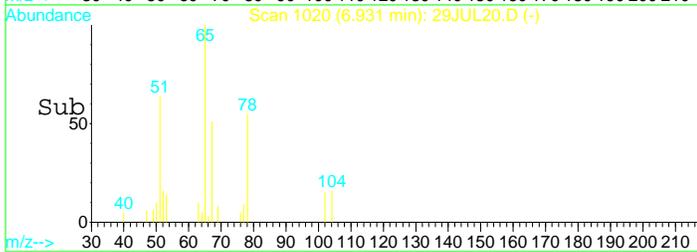
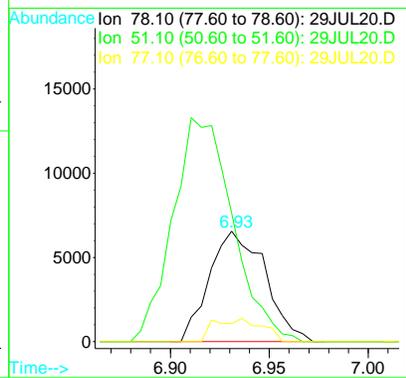
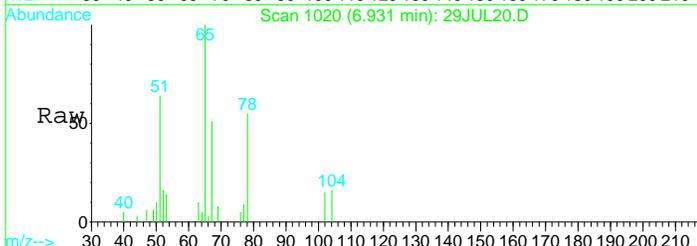
Ion	Ratio	Lower	Upper
65	100		
67	48.7	36.2	67.2
51	52.6	42.0	78.0





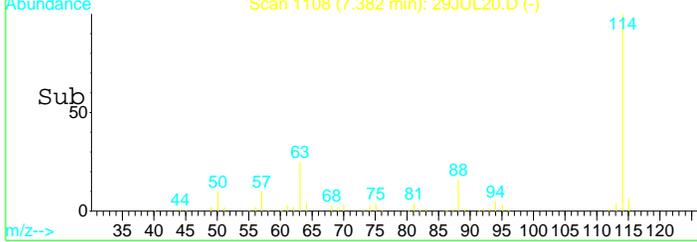
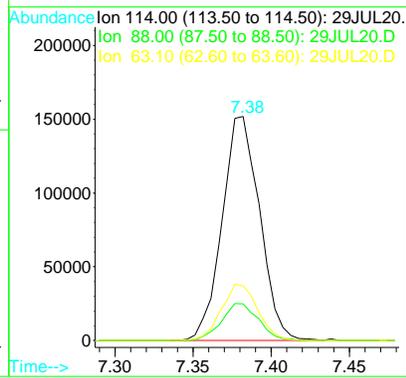
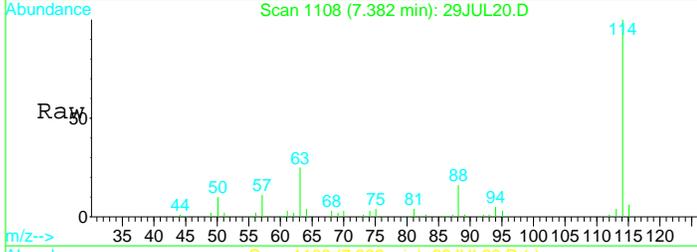
#23
 Benzene
 Concen: 0.37 ug/L
 RT: 6.93 min Scan# 1020
 Delta R.T. -0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

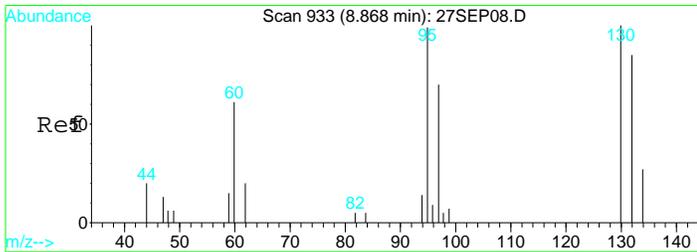
Tgt Ion	Resp	Lower	Upper
78	12833		
51	217.8	114.8	213.2#
77	18.0	15.2	28.2



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. 0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion	Resp	Lower	Upper
114	253732		
88	16.3	11.7	21.7
63	24.4	16.7	30.9

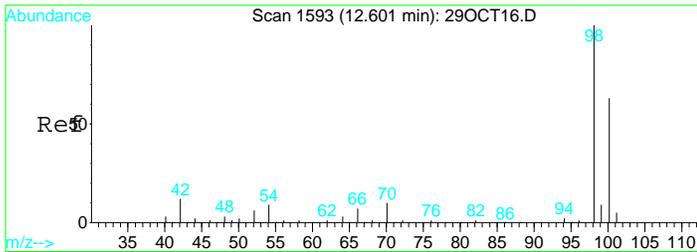
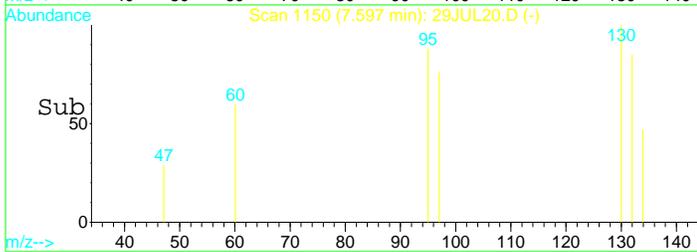
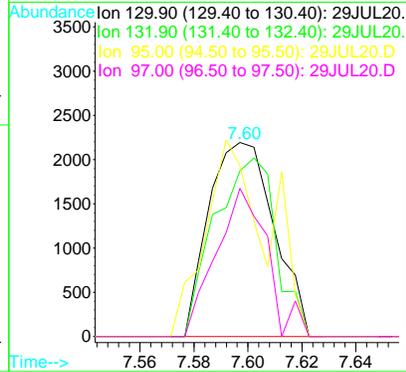
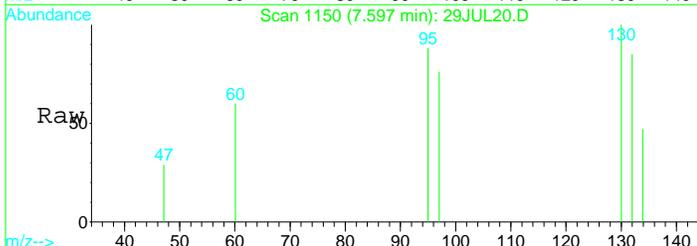




#25
 Trichloroethene
 Concen: 0.42 ug/L
 RT: 7.60 min Scan# 1150
 Delta R.T. 0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion: 130 Resp: 3702

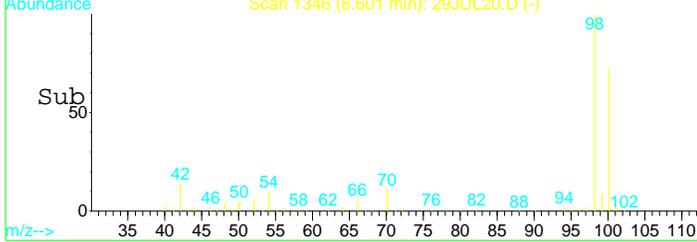
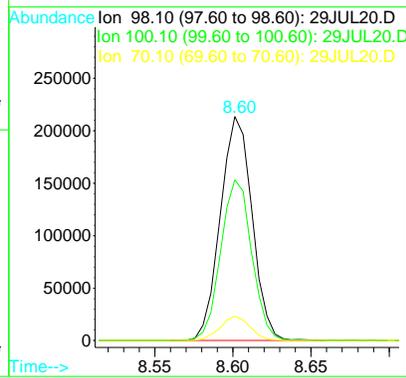
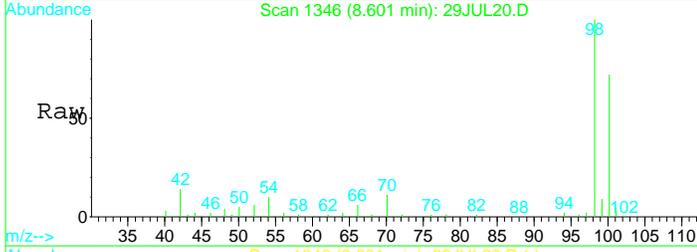
Ion	Ratio	Lower	Upper
130	100		
132	85.6	66.1	122.7
95	95.4	86.1	159.9
97	59.0	52.8	98.0

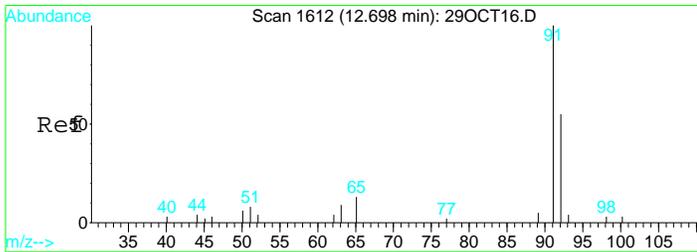


#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion: 98 Resp: 300967

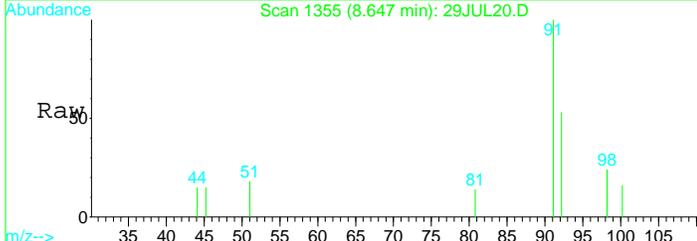
Ion	Ratio	Lower	Upper
98	100		
100	70.0	49.7	92.3
70	10.2	7.3	13.7



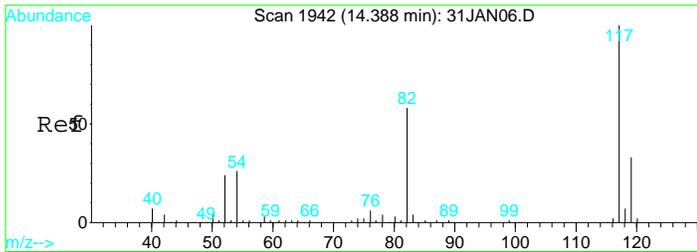
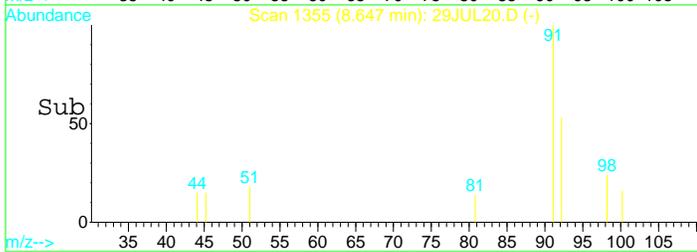
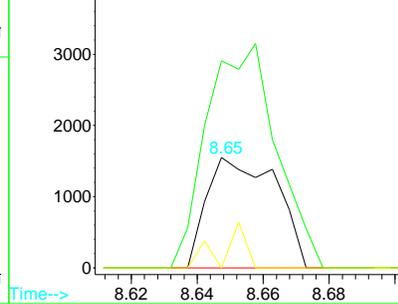


#32
 Toluene
 Concen: 0.10 ug/L
 RT: 8.65 min Scan# 1355
 Delta R.T. -0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion	Resp	Lower	Upper
92	2253		
91	203.7	122.6	227.6
65	13.9	16.5	30.7#



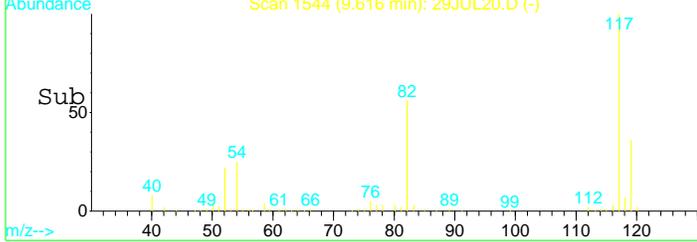
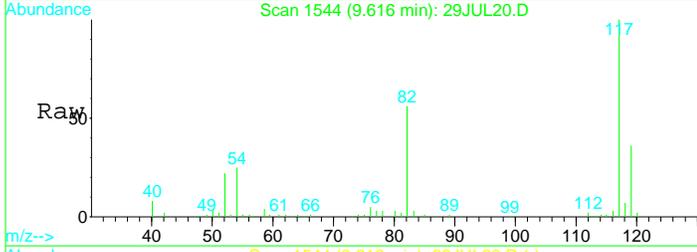
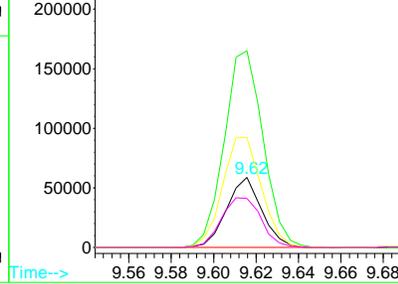
Abundance
 Ion 92.10 (91.60 to 92.60): 29JUL20.D
 Ion 91.10 (90.60 to 91.60): 29JUL20.D
 Ion 65.10 (64.60 to 65.60): 29JUL20.D

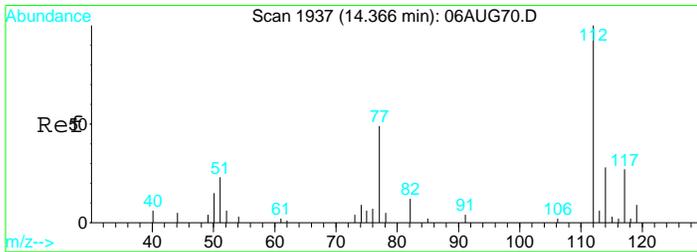


#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.62 min Scan# 1544
 Delta R.T. 0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion	Resp	Lower	Upper
119	67984		
117	309.7	214.5	398.4
82	174.1	117.7	218.7
54	80.3	55.2	102.4

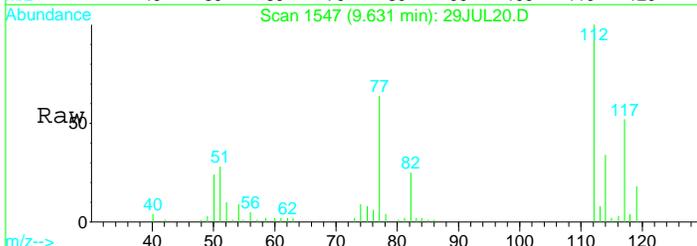
Abundance
 Ion 119.00 (118.50 to 119.50): 29JUL20.D
 Ion 117.00 (116.50 to 117.50): 29JUL20.D
 Ion 82.10 (81.60 to 82.60): 29JUL20.D
 Ion 54.10 (53.60 to 54.60): 29JUL20.D



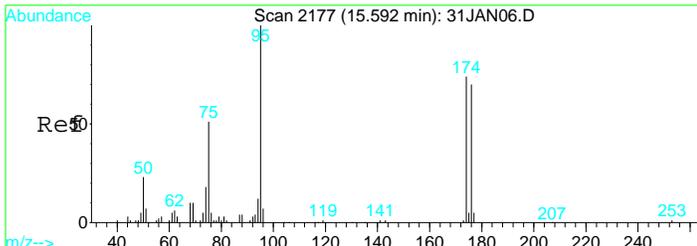
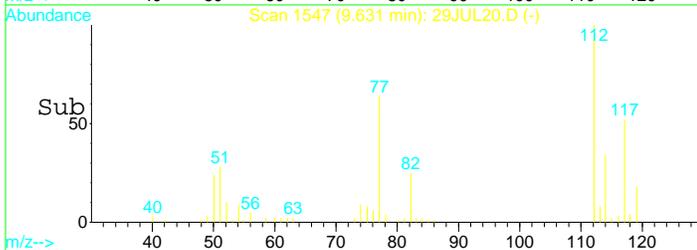
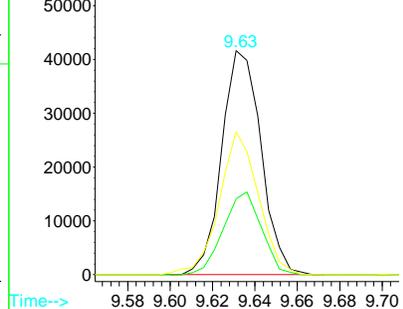


#40
 Chlorobenzene
 Concen: 2.39 ug/L
 RT: 9.63 min Scan# 1547
 Delta R.T. -0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion	Resp	Lower	Upper
112	53769		
114	35.8	20.6	38.4
77	63.4	48.4	90.0

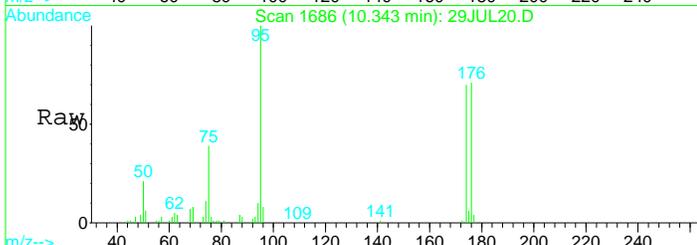


Abundance
 Ion 112.00 (111.50 to 112.50): 29JUL20.D
 Ion 114.00 (113.50 to 114.50): 29JUL20.D
 Ion 77.10 (76.60 to 77.60): 29JUL20.D

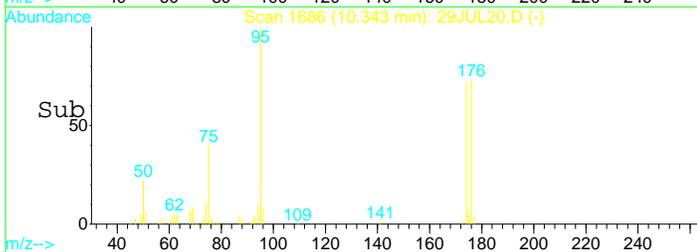
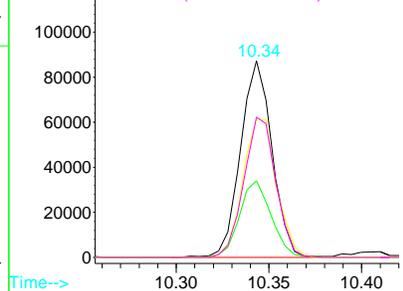


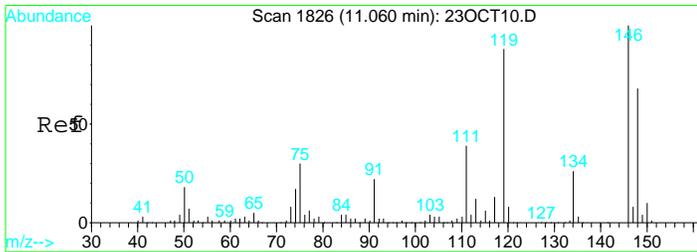
#49
 Bromofluorobenzene SMC#3
 Concen: Below ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion	Resp	Lower	Upper
95	102731		
75	39.3	29.5	54.7
174	75.1	52.3	97.1
176	72.2	49.6	92.2



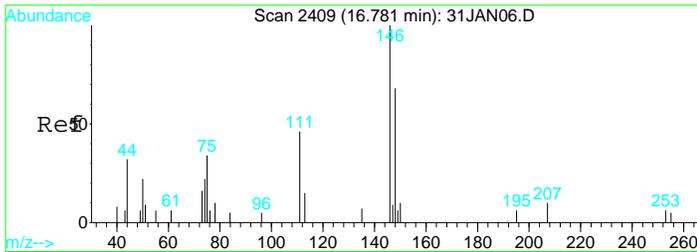
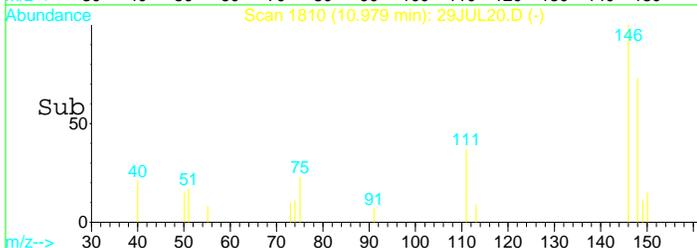
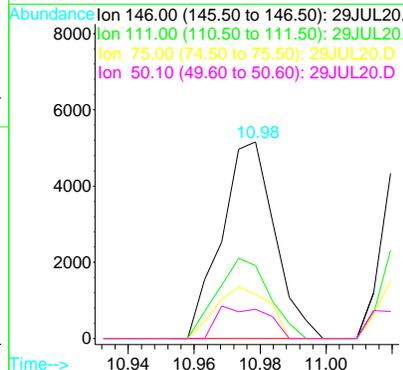
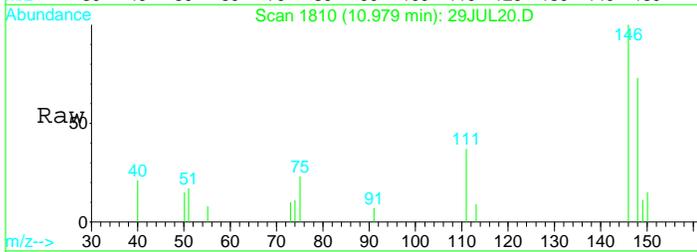
Abundance
 Ion 95.00 (94.50 to 95.50): 29JUL20.D
 Ion 75.00 (74.50 to 75.50): 29JUL20.D
 Ion 173.90 (173.40 to 174.40): 29JUL20.D
 Ion 175.90 (175.40 to 176.40): 29JUL20.D





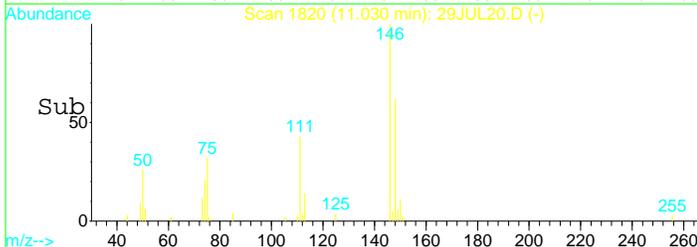
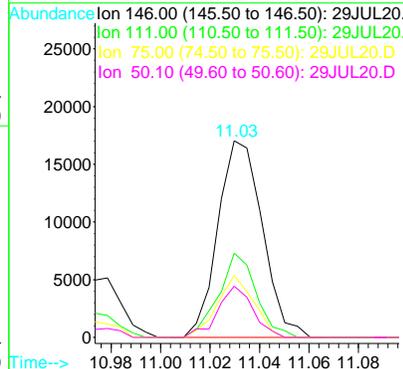
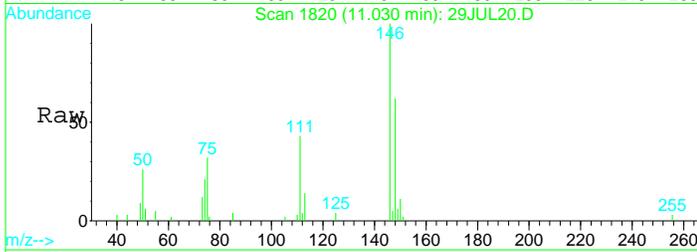
#60
 1,3-Dichlorobenzene
 Concen: 0.34 ug/L
 RT: 10.98 min Scan# 1810
 Delta R.T. 0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

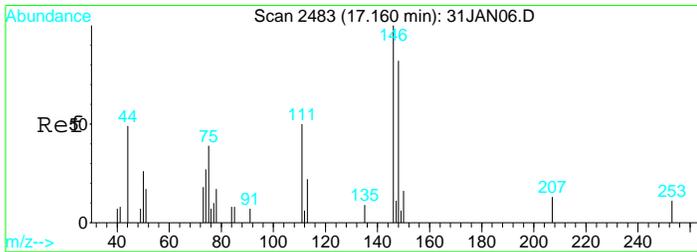
Tgt Ion	Resp	Lower	Upper
146	100		
111	39.8	28.8	53.6
75	26.0	24.0	44.6
50	15.4	14.6	27.0



#61
 1,4-Dichlorobenzene
 Concen: 1.28 ug/L
 RT: 11.03 min Scan# 1820
 Delta R.T. -0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

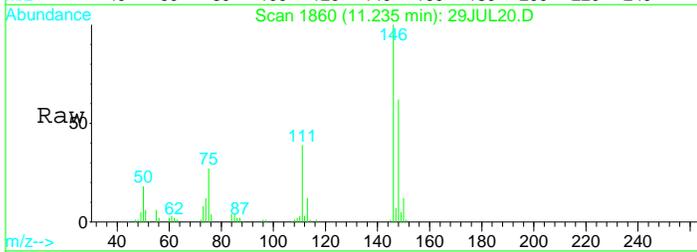
Tgt Ion	Resp	Lower	Upper
146	100		
111	36.1	28.1	52.3
75	25.9	20.3	37.7
50	20.6	16.0	29.6



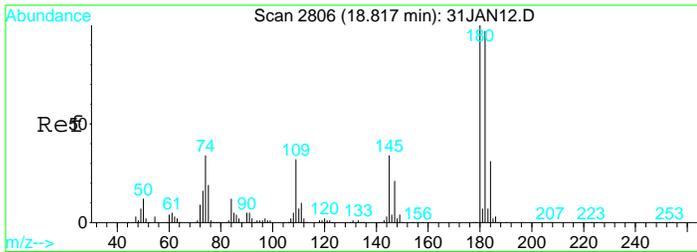
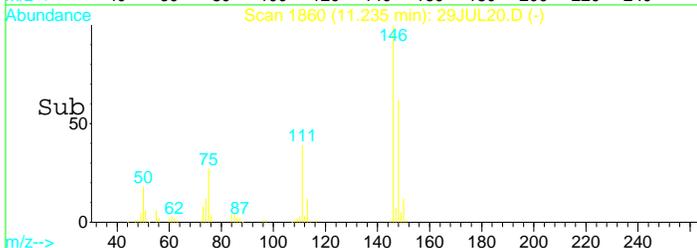
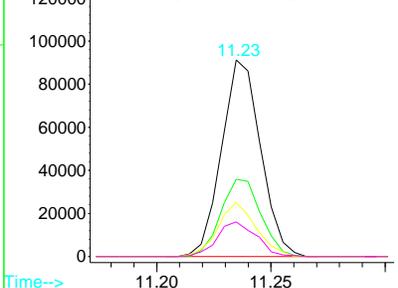


#63
 1,2-Dichlorobenzene
 Concen: 7.40 ug/L
 RT: 11.23 min Scan# 1860
 Delta R.T. -0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion	Resp	Lower	Upper
146	108527		
111	40.2	28.8	53.6
75	26.8	19.8	36.8
50	17.8	9.7	17.9

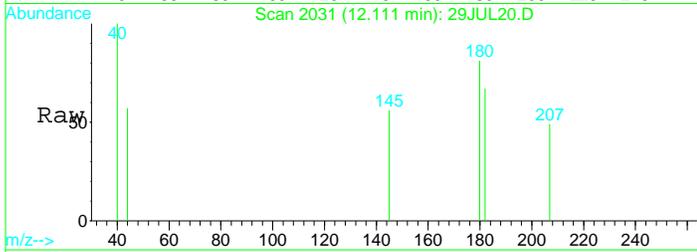


Abundance
 Ion 146.00 (145.50 to 146.50): 29JUL20.
 Ion 111.00 (110.50 to 111.50): 29JUL20.
 Ion 75.00 (74.50 to 75.50): 29JUL20.D
 Ion 50.10 (49.60 to 50.60): 29JUL20.D

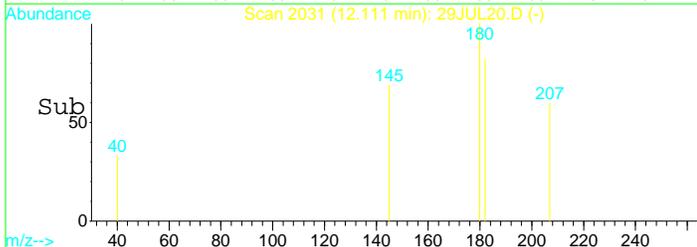
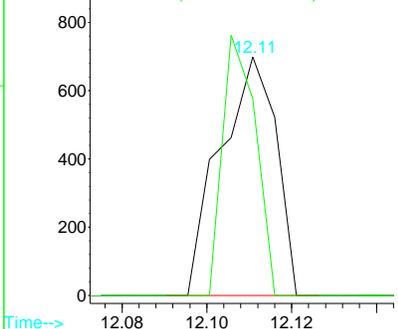


#66
 1,2,4-trichlorobenzene
 Concen: 0.08 ug/L
 RT: 12.11 min Scan# 2031
 Delta R.T. 0.00 min
 Lab File: 29JUL20.D
 Acq: 29 Jul 2017 9:49 pm

Tgt Ion	Resp	Lower	Upper
180	640		
182	64.4	65.4	121.4#



Abundance
 Ion 179.90 (179.40 to 180.40): 29JUL20.
 Ion 181.90 (181.40 to 182.40): 29JUL20.



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL20.D Vial: 20
 Acq On : 29 Jul 2017 9:49 pm Operator: MGC
 Sample : 1720405-05 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:46 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	169069	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	253732	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	67984	10.00	ug/L	0.00
Target Compounds						Qvalue
4) 1,2-dichlorotrifluoroethan	3.29	67	156279	14.03	ug/L	# 75

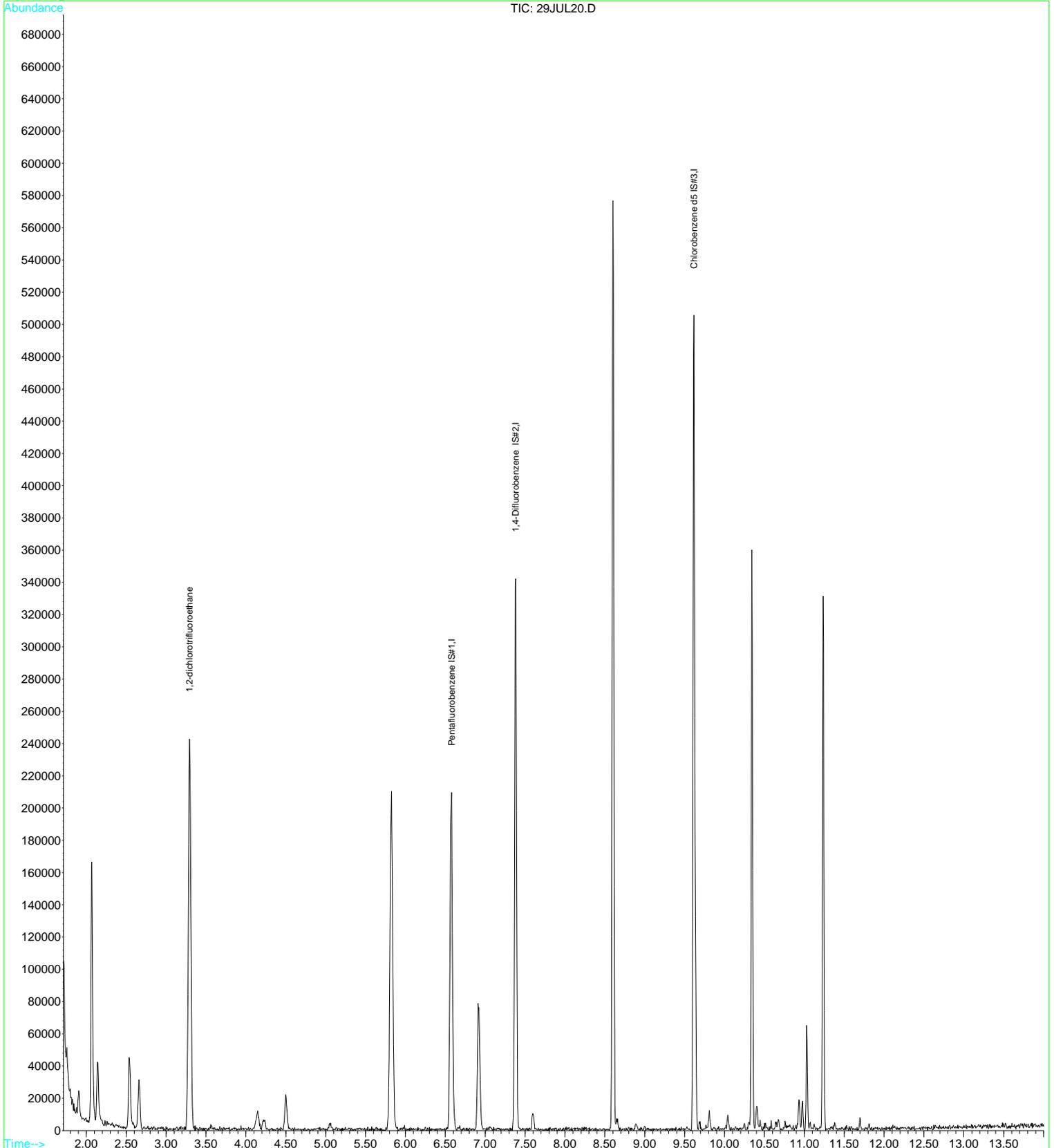
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL20.D
Acq On : 29 Jul 2017 9:49 pm
Sample : 1720405-05
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:46 2017

Vial: 20
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL21.D
 Acq On : 29 Jul 2017 10:12 pm
 Sample : 1720405-06
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:33 2017

Vial: 21
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	175384	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	259277	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	65650	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	53134	10.37	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	103.70%
31) Toluene d8 SMC#2	8.60	98	303309	9.47	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.70%
49) Bromofluorobenzene SMC#3	10.34	95	99477	10.15	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.50%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
12) T-1,2-dichloroethene	4.50	96	1405	0.16	ug/L	# 72
15) Cis-1,2-dichloroethene	5.82	96	43803	4.78	ug/L	90
25) Trichloroethene	7.60	130	3198	0.36	ug/L	81

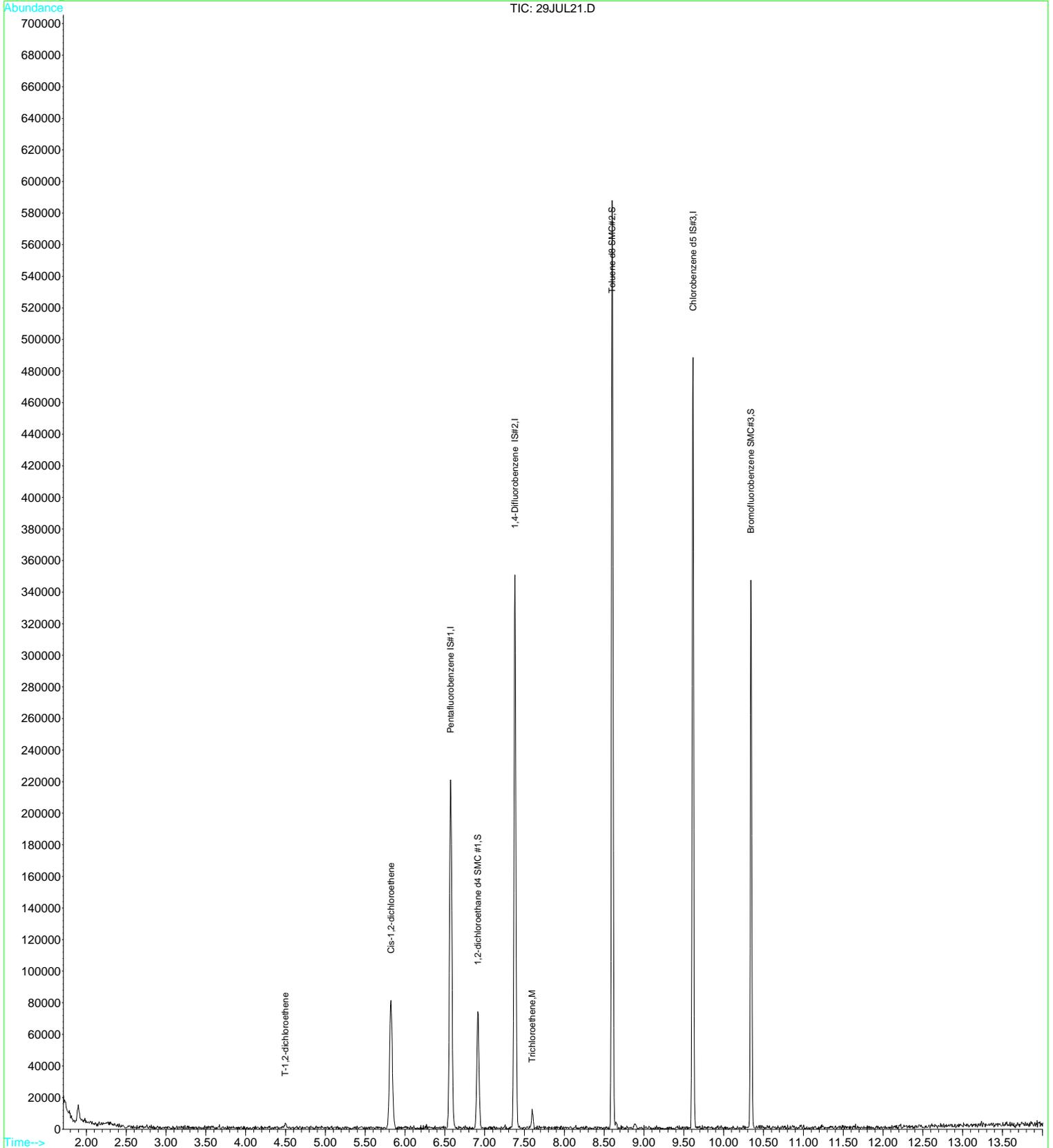
Quantitation Report

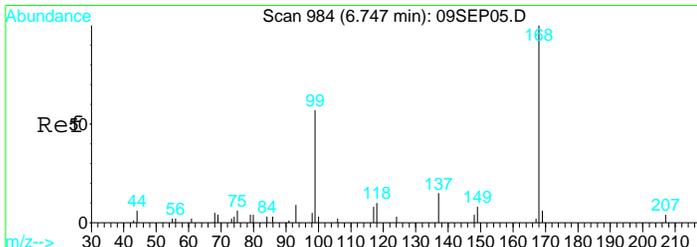
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL21.D
Acq On : 29 Jul 2017 10:12 pm
Sample : 1720405-06
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:33 2017

Vial: 21
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

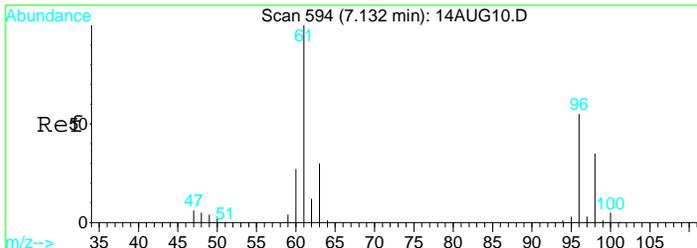
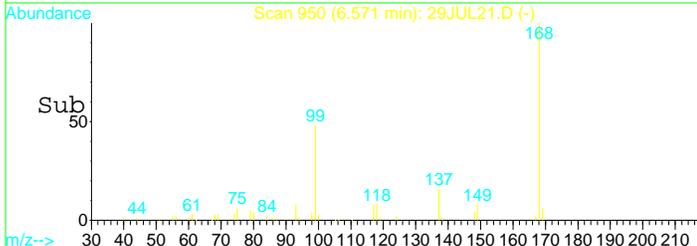
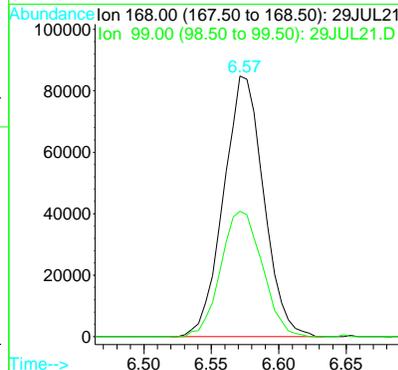
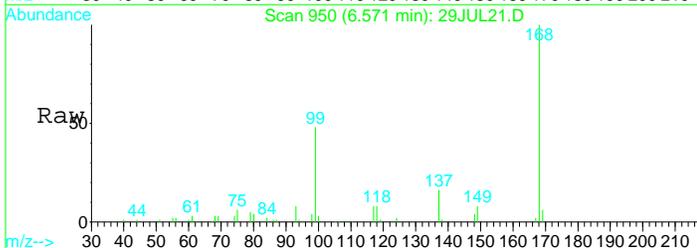
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Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





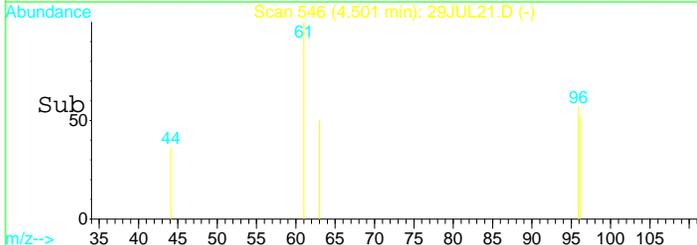
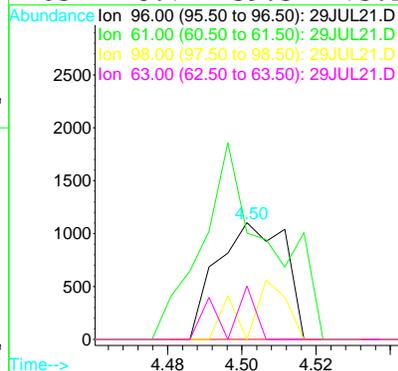
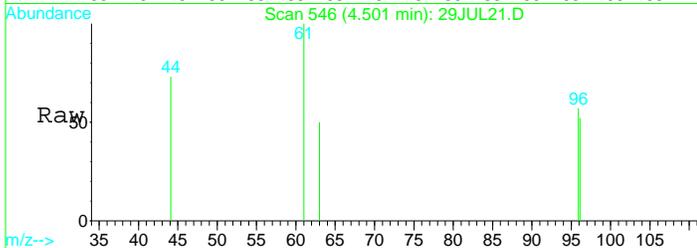
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.01 min
 Lab File: 29JUL21.D
 Acq: 29 Jul 2017 10:12 pm

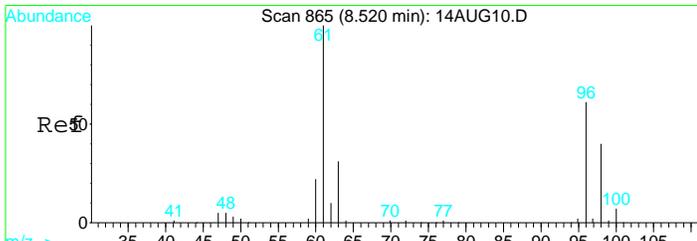
Tgt Ion	Resp	Lower	Upper
168	100		
99	49.6	38.7	71.9



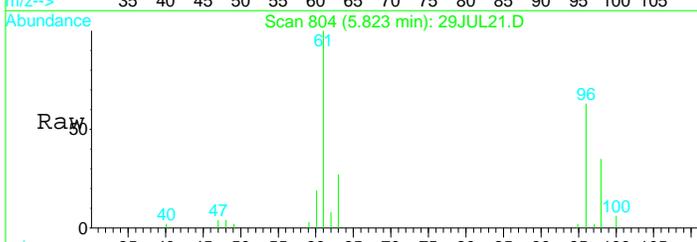
#12
 T-1,2-dichloroethene
 Concen: 0.16 ug/L
 RT: 4.50 min Scan# 546
 Delta R.T. -0.00 min
 Lab File: 29JUL21.D
 Acq: 29 Jul 2017 10:12 pm

Tgt Ion	Resp	Lower	Upper
96	100		
61	165.7	129.4	240.4
98	30.0	41.5	77.1#
63	8.7	39.3	73.1#



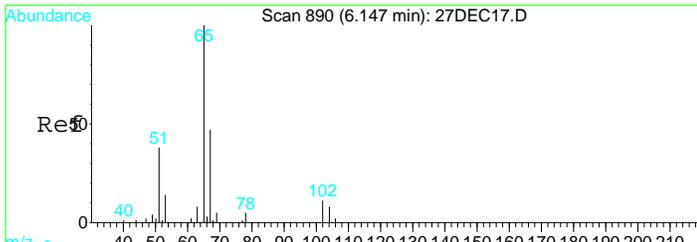
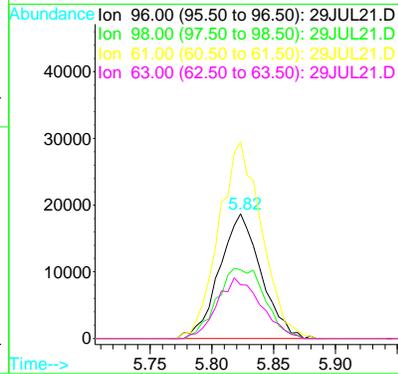
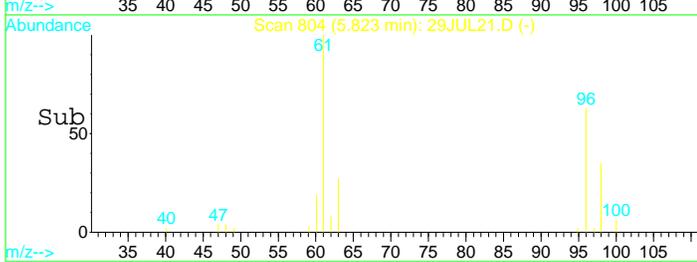


#15
 Cis-1,2-dichloroethene
 Concen: 4.78 ug/L
 RT: 5.82 min Scan# 804
 Delta R.T. -0.00 min
 Lab File: 29JUL21.D
 Acq: 29 Jul 2017 10:12 pm

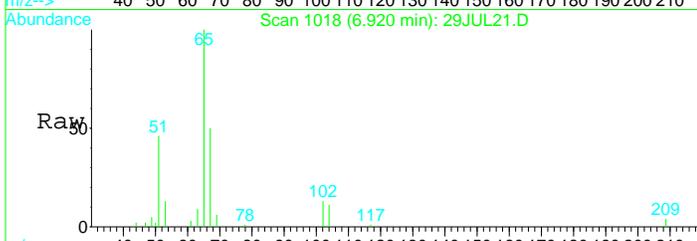


Tgt Ion: 96 Resp: 43803

Ion	Ratio	Lower	Upper
96	100		
98	64.5	51.9	96.3
61	162.1	122.8	228.0
63	51.1	42.1	78.3

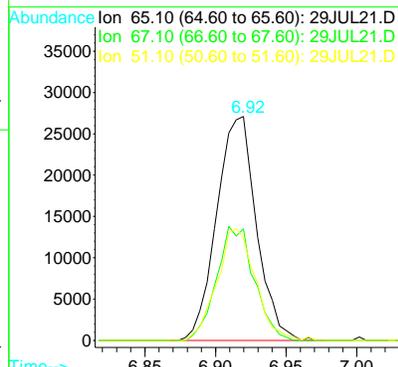
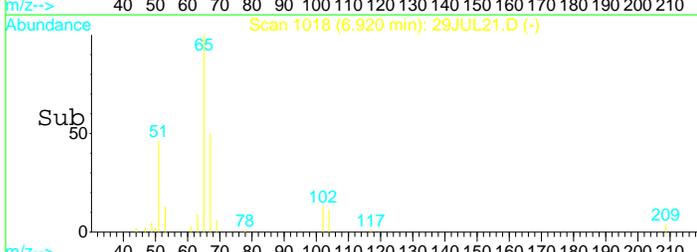


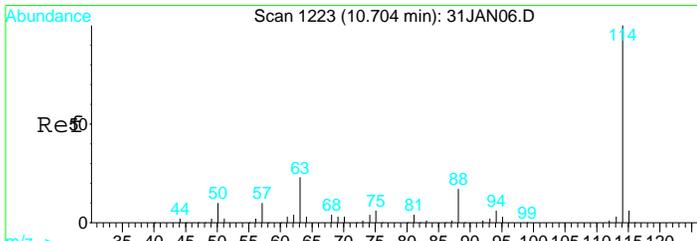
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1018
 Delta R.T. 0.00 min
 Lab File: 29JUL21.D
 Acq: 29 Jul 2017 10:12 pm



Tgt Ion: 65 Resp: 53134

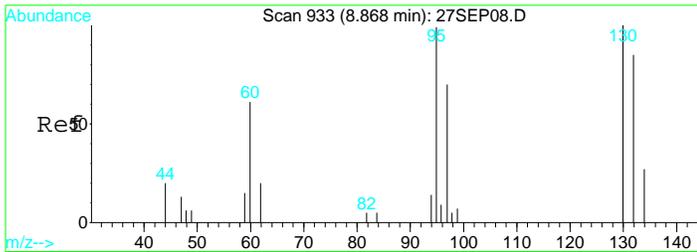
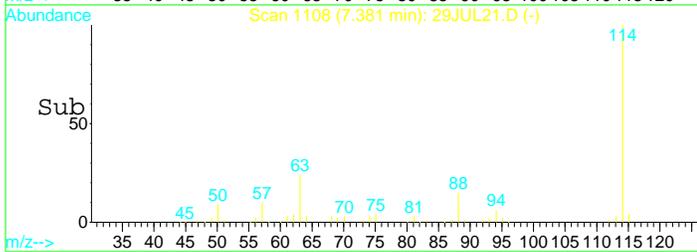
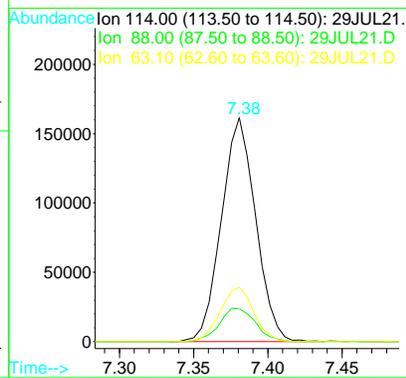
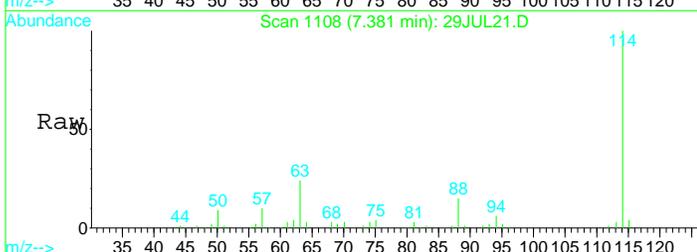
Ion	Ratio	Lower	Upper
65	100		
67	48.1	36.2	67.2
51	48.4	42.0	78.0





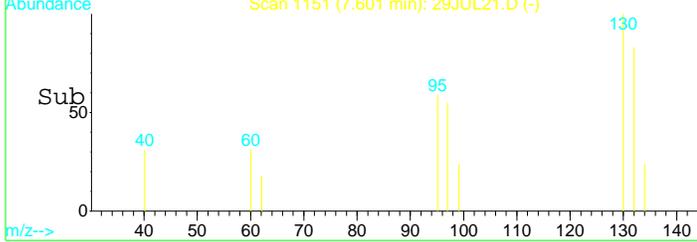
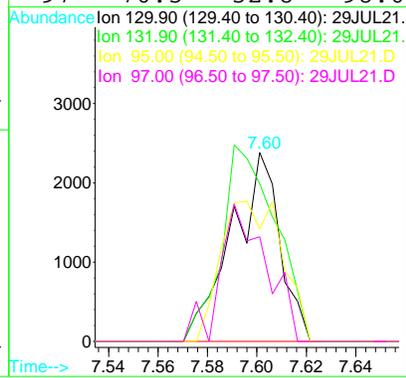
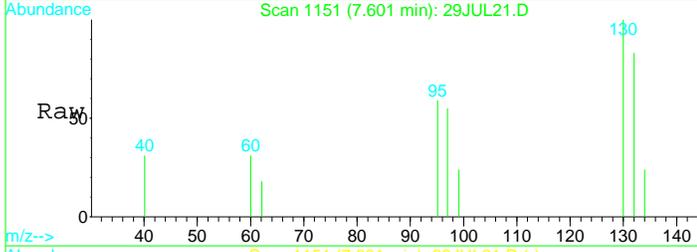
#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. -0.00 min
 Lab File: 29JUL21.D
 Acq: 29 Jul 2017 10:12 pm

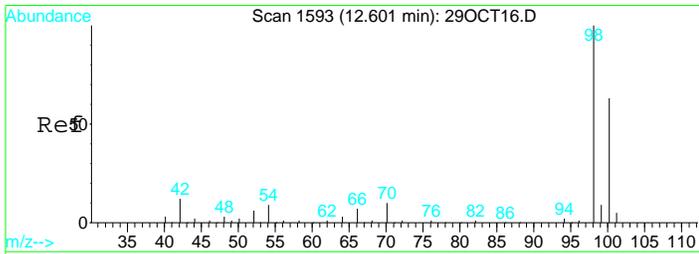
Tgt Ion	Resp	Lower	Upper
114	259277		
114	100		
88	15.7	11.7	21.7
63	23.9	16.7	30.9



#25
 Trichloroethene
 Concen: 0.36 ug/L
 RT: 7.60 min Scan# 1151
 Delta R.T. 0.00 min
 Lab File: 29JUL21.D
 Acq: 29 Jul 2017 10:12 pm

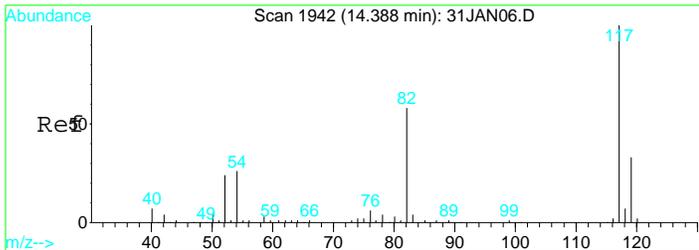
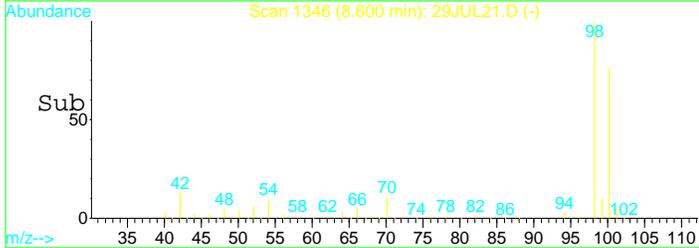
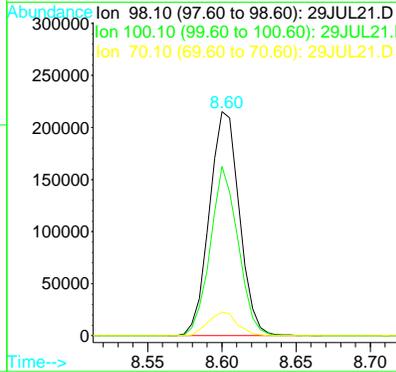
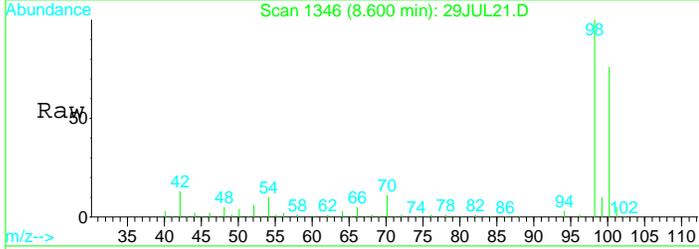
Tgt Ion	Resp	Lower	Upper
130	3198		
130	100		
132	116.8	66.1	122.7
95	95.2	86.1	159.9
97	70.5	52.8	98.0





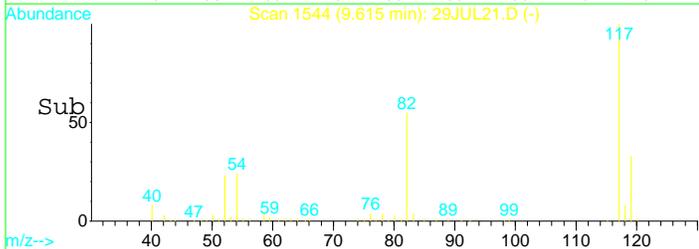
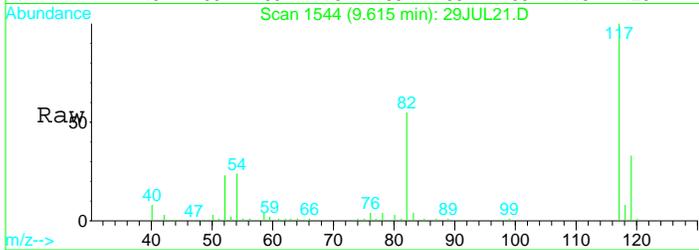
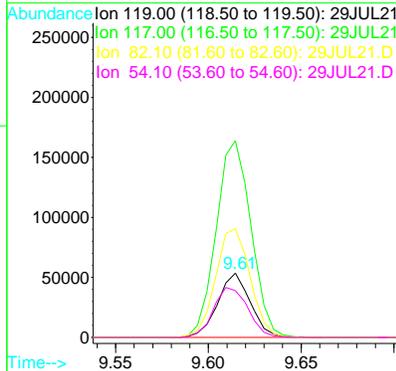
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. -0.00 min
 Lab File: 29JUL21.D
 Acq: 29 Jul 2017 10:12 pm

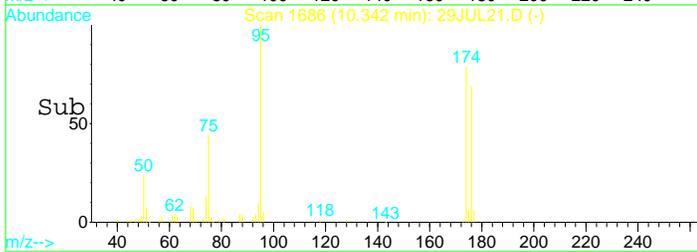
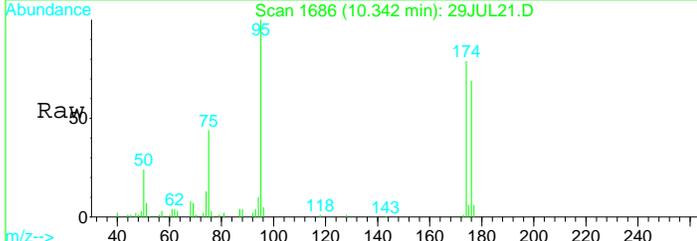
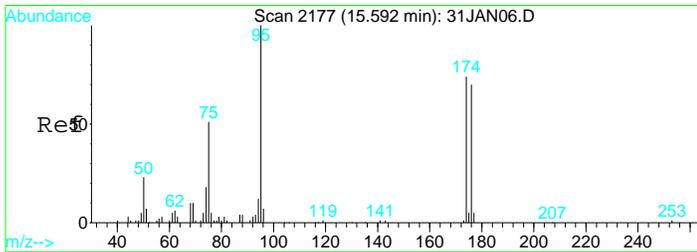
Tgt Ion	Resp	Lower	Upper
98	100		
100	69.8	49.7	92.3
70	10.3	7.3	13.7



#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1544
 Delta R.T. -0.00 min
 Lab File: 29JUL21.D
 Acq: 29 Jul 2017 10:12 pm

Tgt Ion	Resp	Lower	Upper
119	100		
117	325.1	214.5	398.4
82	177.7	117.7	218.7
54	82.3	55.2	102.4



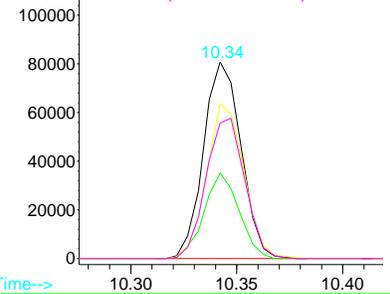


#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. -0.00 min
 Lab File: 29JUL21.D
 Acq: 29 Jul 2017 10:12 pm

Tgt Ion: 95 Resp: 99477

Ion	Ratio	Lower	Upper
95	100		
75	40.7	29.5	54.7
174	78.3	52.3	97.1
176	73.6	49.6	92.2

Abundance Ion 95.00 (94.50 to 95.50): 29JUL21.D
 Ion 75.00 (74.50 to 75.50): 29JUL21.D
 Ion 173.90 (173.40 to 174.40): 29JUL21.D
 Ion 175.90 (175.40 to 176.40): 29JUL21.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL21.D Vial: 21
 Acq On : 29 Jul 2017 10:12 pm Operator: MGC
 Sample : 1720405-06 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:46 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	175384	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	259277	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	65650	10.00	ug/L	0.00

Target Compounds Qvalue

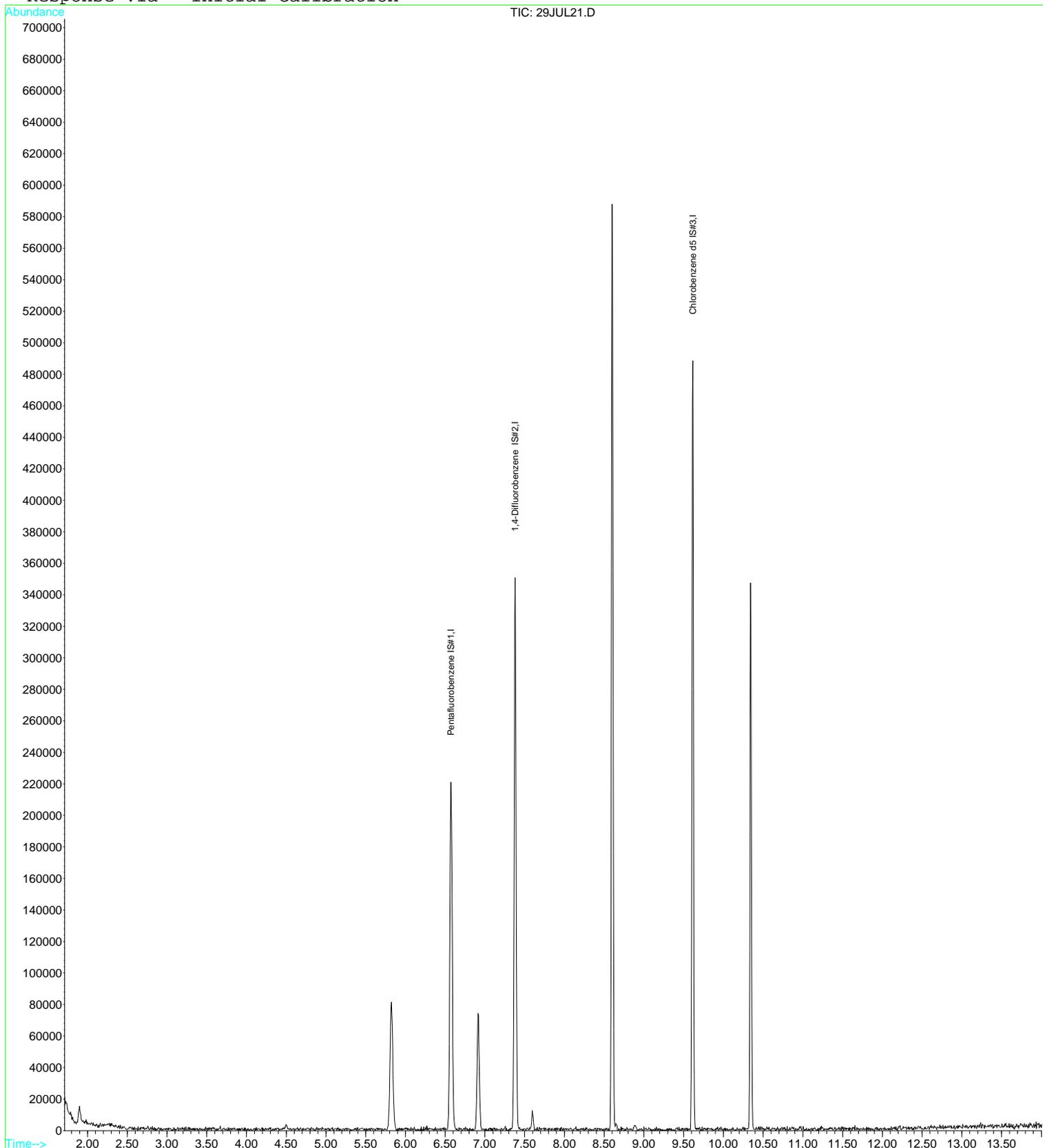
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL21.D
Acq On : 29 Jul 2017 10:12 pm
Sample : 1720405-06
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:46 2017

Vial: 21
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL22.D Vial: 22
 Acq On : 29 Jul 2017 10:35 pm Operator: MGC
 Sample : 1720405-10 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 30 5:34 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	180098	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	267208	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	68034	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	52794	10.04	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	100.40%
31) Toluene d8 SMC#2	8.60	98	317526	9.62	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.20%
49) Bromofluorobenzene SMC#3	10.34	95	97471	9.59	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	95.90%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	136320	10.10	ug/L #	68
12) T-1,2-dichloroethene	4.50	96	28151	3.12	ug/L	95
13) 1,1-Dichloroethane	5.06	63	16952	0.88	ug/L	99
15) Cis-1,2-dichloroethene	5.82	96	106086	11.28	ug/L	88
23) Benzene	6.93	78	7451	0.20	ug/L #	1
25) Trichloroethene	7.60	130	11086	1.21	ug/L	88
32) Toluene	8.65	92	2455	0.11	ug/L #	94
40) Chlorobenzene	9.63	112	22701	1.01	ug/L	94
60) 1,3-Dichlorobenzene	10.98	146	2239	0.13	ug/L	89
61) 1,4-Dichlorobenzene	11.03	146	10610	0.64	ug/L	98
63) 1,2-Dichlorobenzene	11.24	146	80696	5.50	ug/L #	94

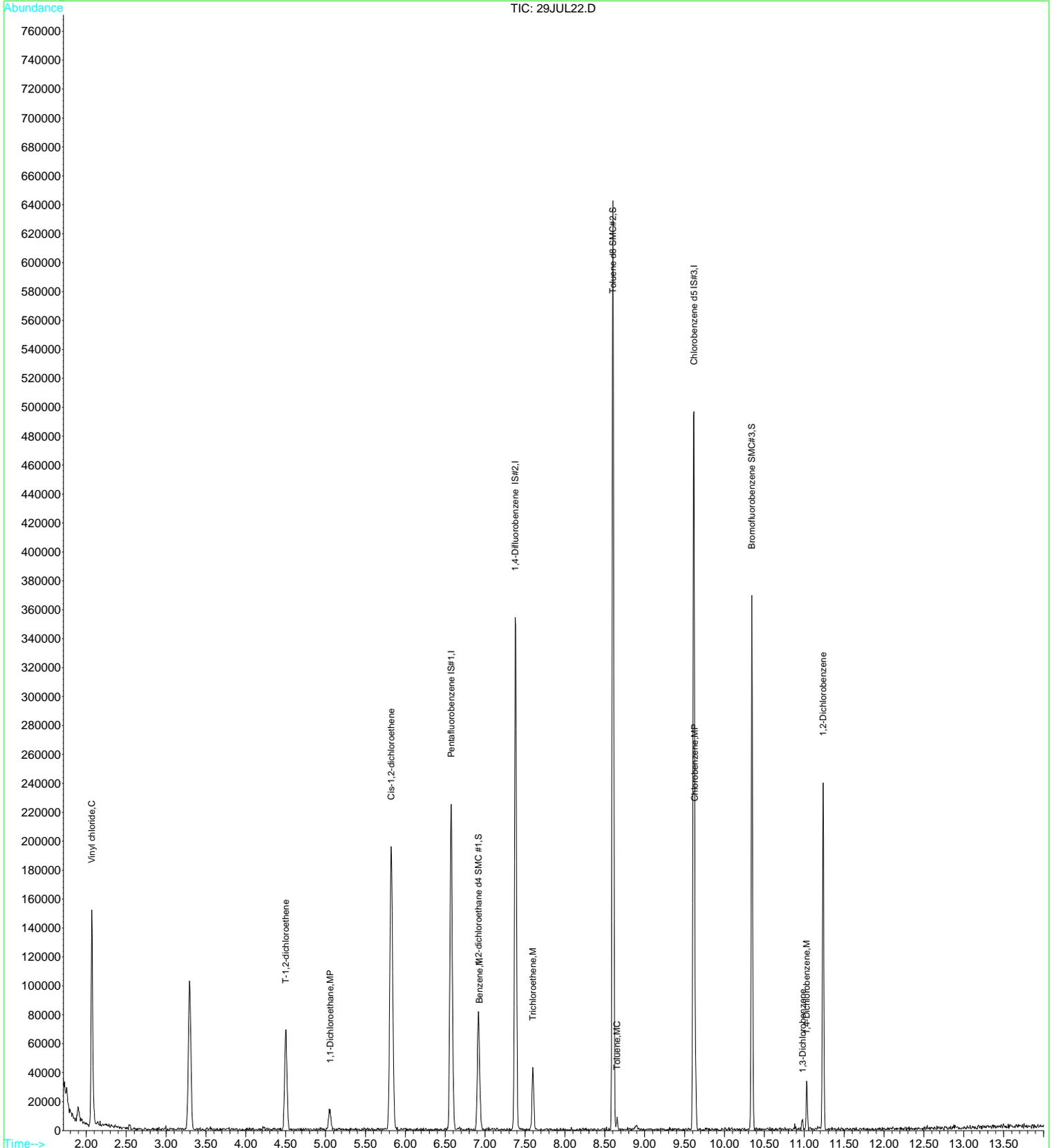
(#) = qualifier out of range (m) = manual integration

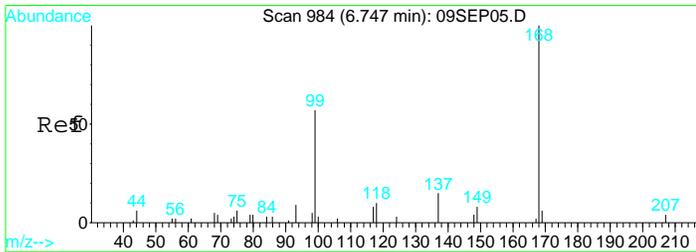
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL22.D
Acq On : 29 Jul 2017 10:35 pm
Sample : 1720405-10
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:34 2017

Vial: 22
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

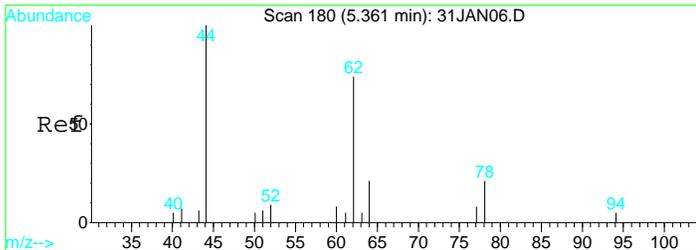
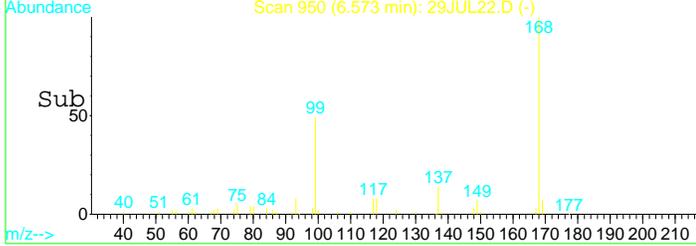
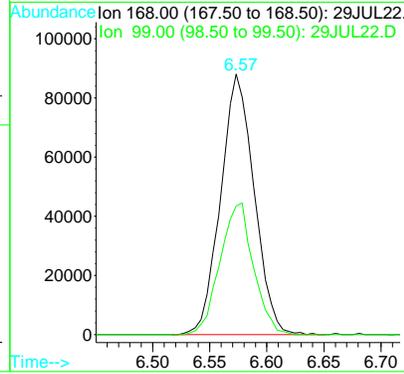
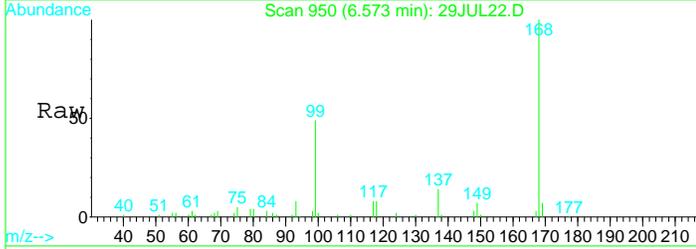
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





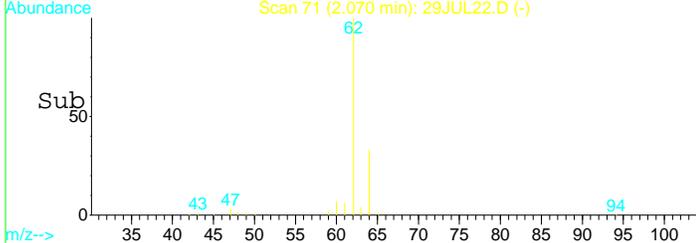
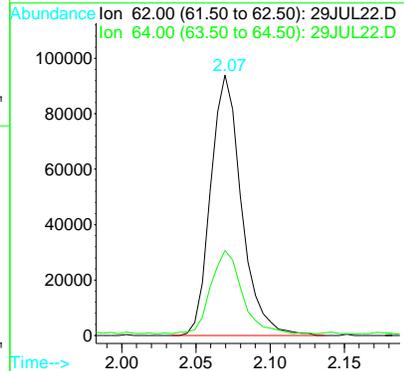
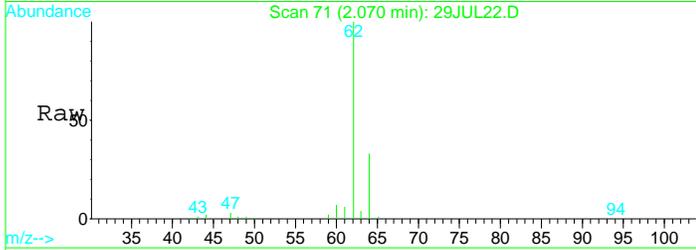
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

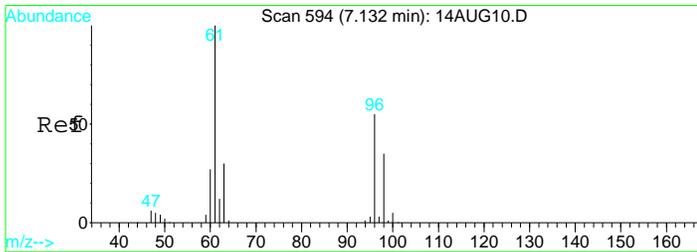
Tgt Ion: 168 Resp: 180098
 Ion Ratio Lower Upper
 168 100
 99 50.2 38.7 71.9



#4
 Vinyl chloride
 Concen: 10.10 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

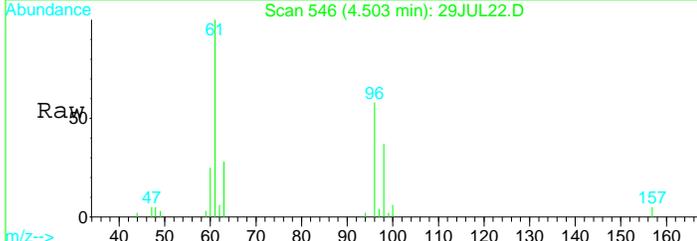
Tgt Ion: 62 Resp: 136320
 Ion Ratio Lower Upper
 62 100
 64 32.7 39.3 72.9#



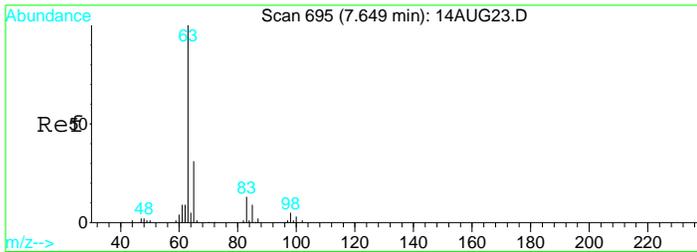
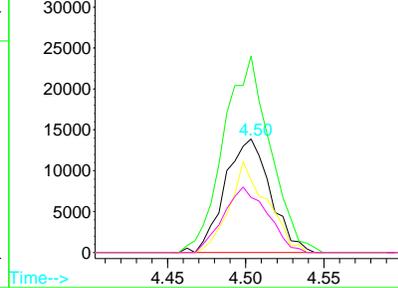
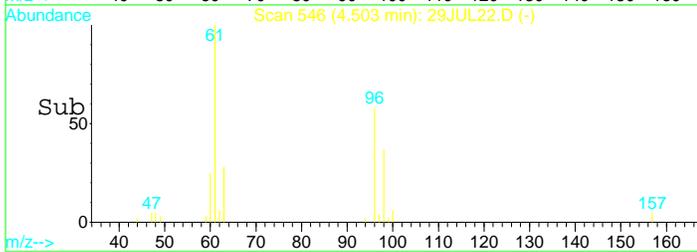


#12
 T-1,2-dichloroethene
 Concen: 3.12 ug/L
 RT: 4.50 min Scan# 546
 Delta R.T. 0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

Tgt Ion	Resp	Lower	Upper
96	28151		
61	176.9	129.4	240.4
98	65.8	41.5	77.1
63	55.9	39.3	73.1

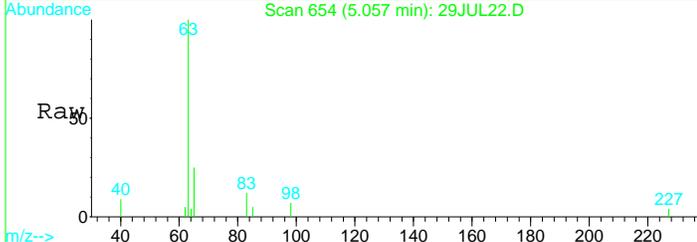


Abundance Ion 96.00 (95.50 to 96.50): 29JUL22.D
 Ion 61.00 (60.50 to 61.50): 29JUL22.D
 Ion 98.00 (97.50 to 98.50): 29JUL22.D
 Ion 63.00 (62.50 to 63.50): 29JUL22.D

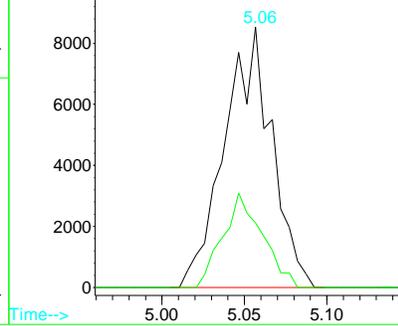
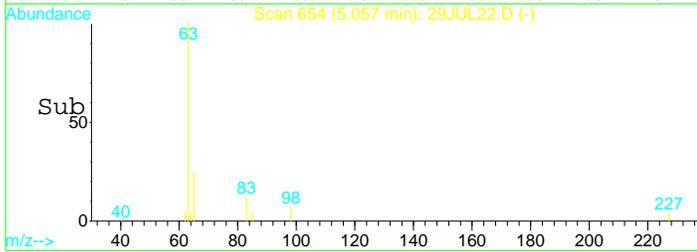


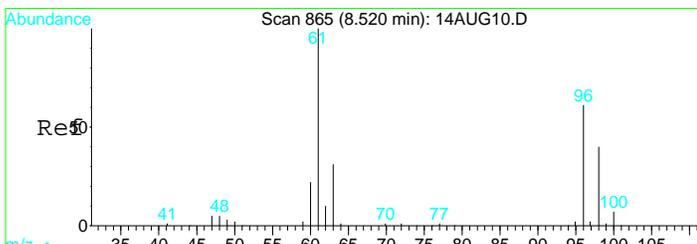
#13
 1,1-Dichloroethane
 Concen: 0.88 ug/L
 RT: 5.06 min Scan# 654
 Delta R.T. 0.01 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

Tgt Ion	Resp	Lower	Upper
63	16952		
65	30.3	20.8	38.6

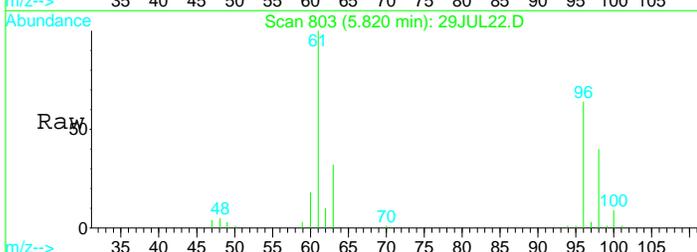


Abundance Ion 63.00 (62.50 to 63.50): 29JUL22.D
 Ion 65.00 (64.50 to 65.50): 29JUL22.D



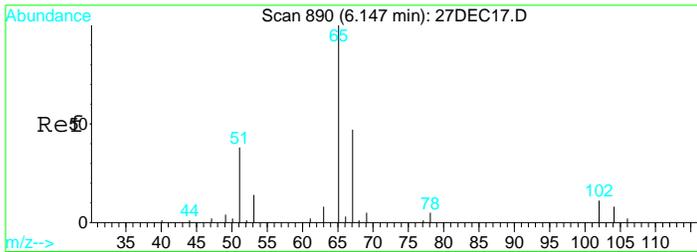
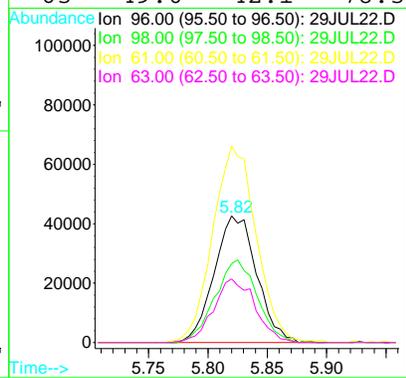
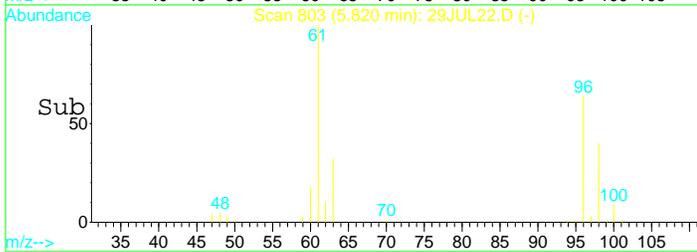


#15
 Cis-1,2-dichloroethene
 Concen: 11.28 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

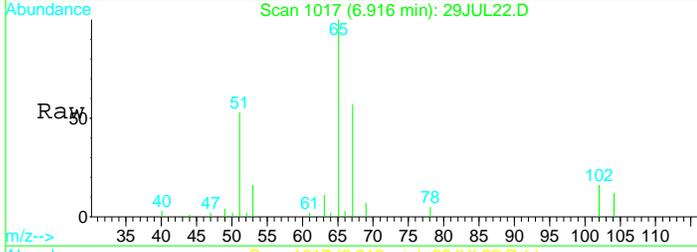


Tgt Ion: 96 Resp: 106086

Ion	Ratio	Lower	Upper
96	100		
98	64.6	51.9	96.3
61	158.4	122.8	228.0
63	49.0	42.1	78.3

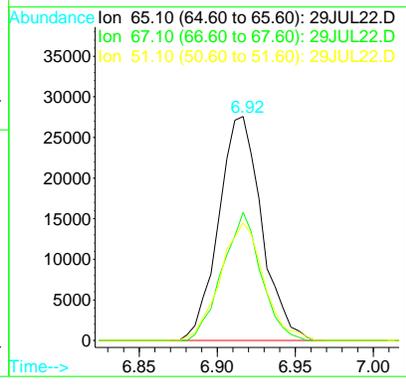
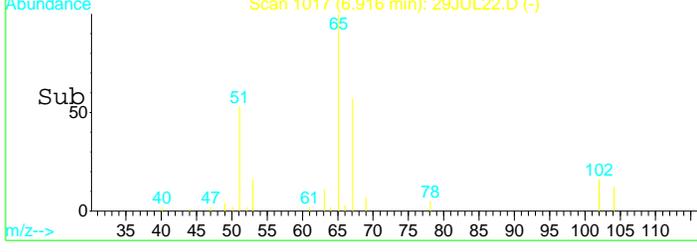


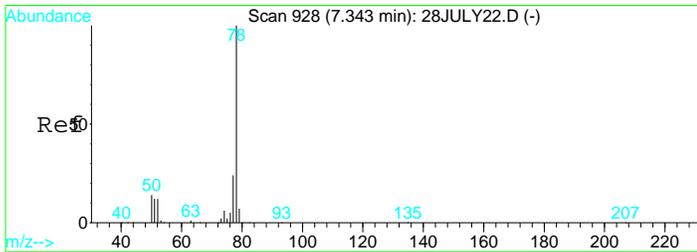
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1017
 Delta R.T. 0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm



Tgt Ion: 65 Resp: 52794

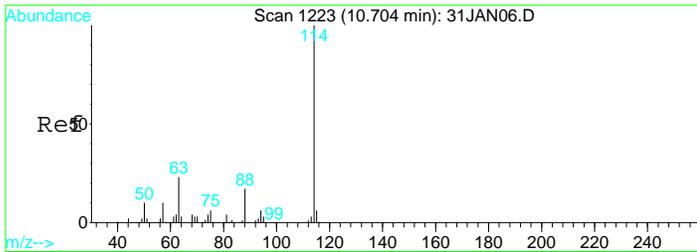
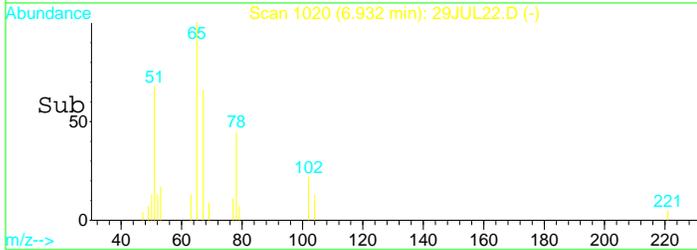
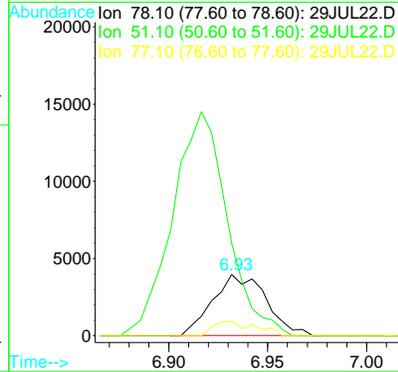
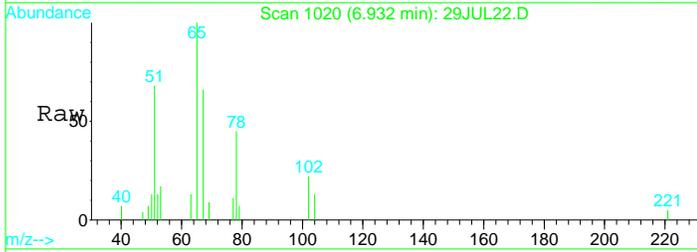
Ion	Ratio	Lower	Upper
65	100		
67	51.3	36.2	67.2
51	53.0	42.0	78.0





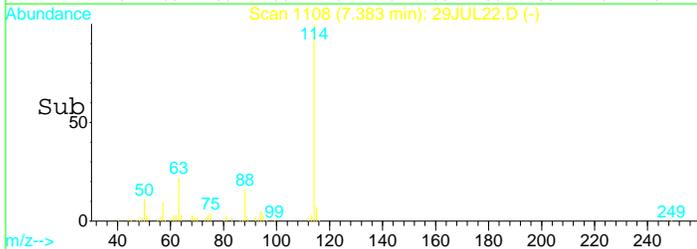
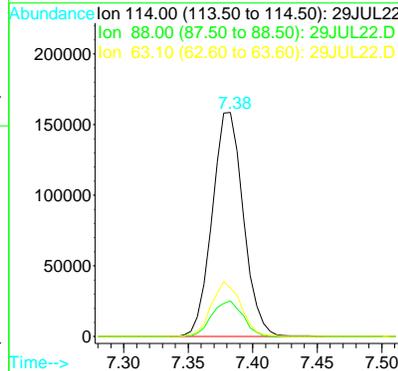
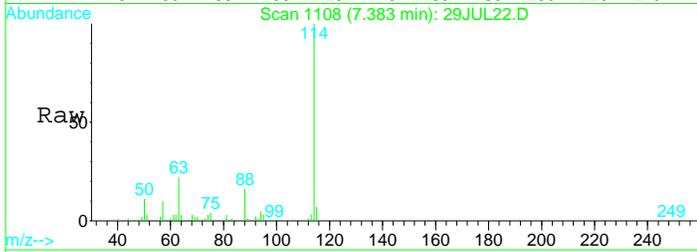
#23
Benzene
Concen: 0.20 ug/L
RT: 6.93 min Scan# 1020
Delta R.T. -0.00 min
Lab File: 29JUL22.D
Acq: 29 Jul 2017 10:35 pm

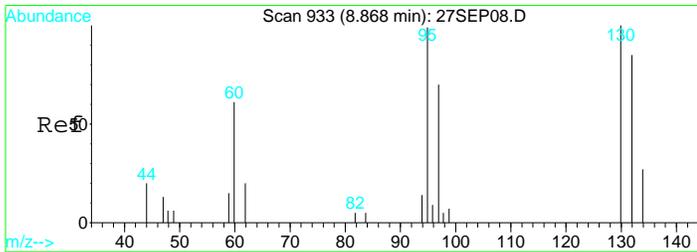
Tgt Ion	Resp	Lower	Upper
78	100		
51	375.3	114.8	213.2#
77	18.6	15.2	28.2



#24
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.38 min Scan# 1108
Delta R.T. 0.00 min
Lab File: 29JUL22.D
Acq: 29 Jul 2017 10:35 pm

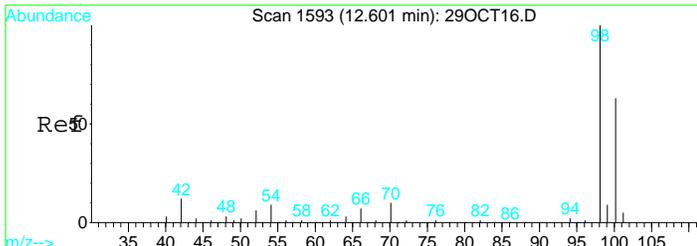
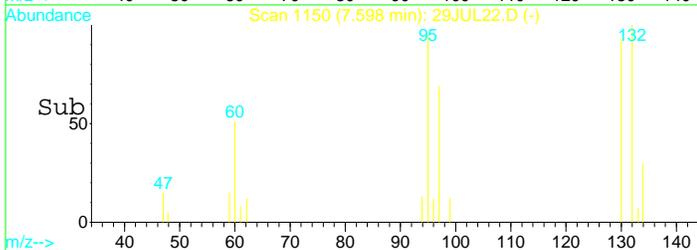
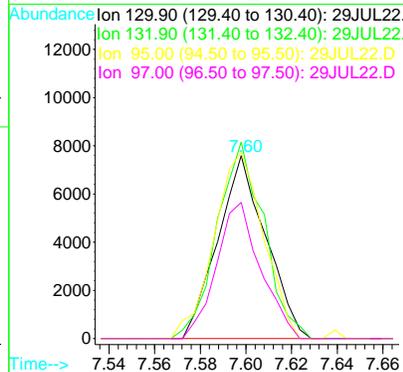
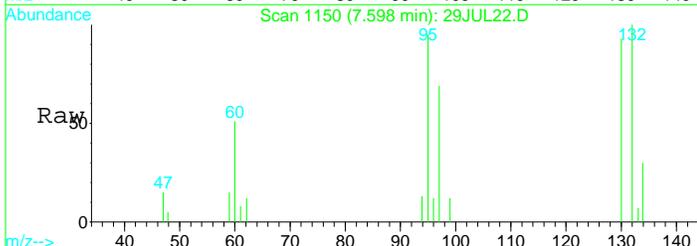
Tgt Ion	Resp	Lower	Upper
114	100		
88	15.9	11.7	21.7
63	23.2	16.7	30.9





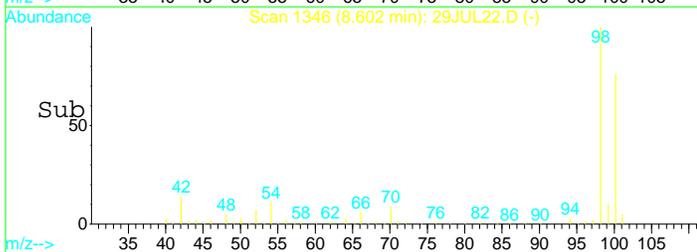
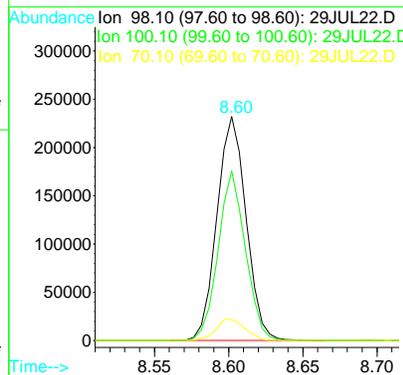
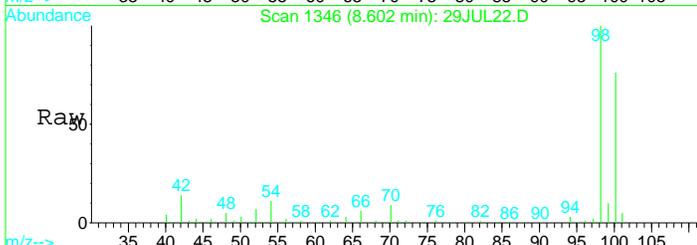
#25
 Trichloroethene
 Concen: 1.21 ug/L
 RT: 7.60 min Scan# 1150
 Delta R.T. 0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

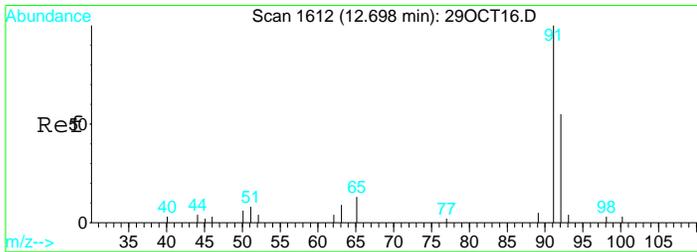
Tgt Ion	Resp	Lower	Upper
130	11086		
130	100		
132	104.6	66.1	122.7
95	104.7	86.1	159.9
97	68.2	52.8	98.0



#31
 Toluene d8 SMC#2
 Concen: Below ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

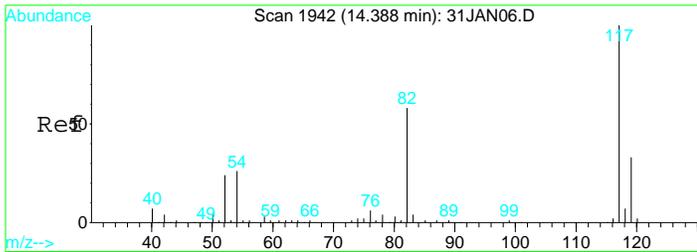
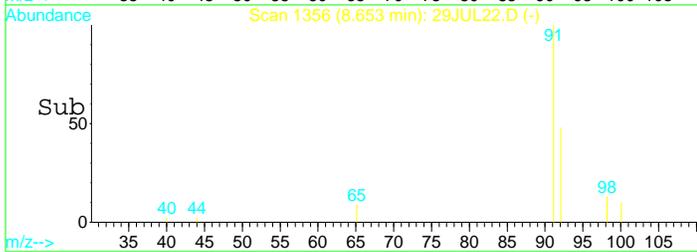
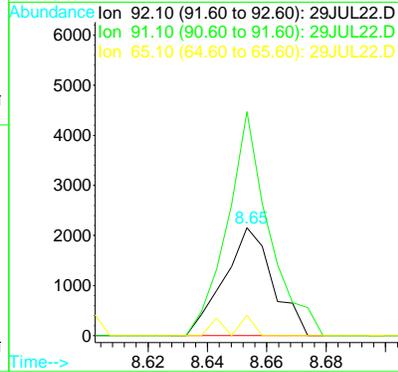
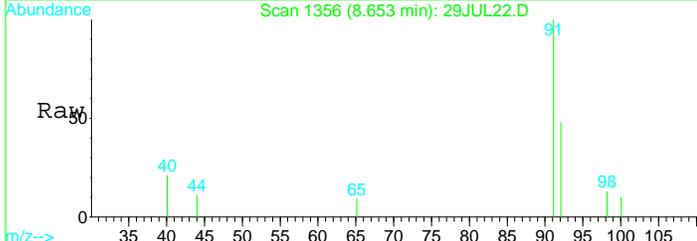
Tgt Ion	Resp	Lower	Upper
98	317526		
98	100		
100	70.6	49.7	92.3
70	9.6	7.3	13.7





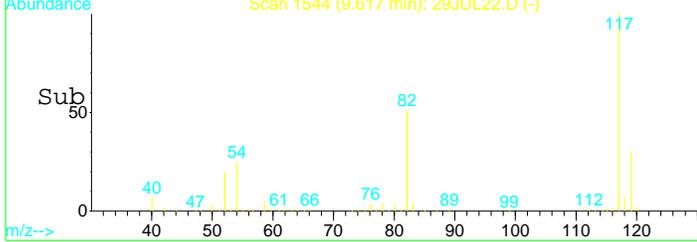
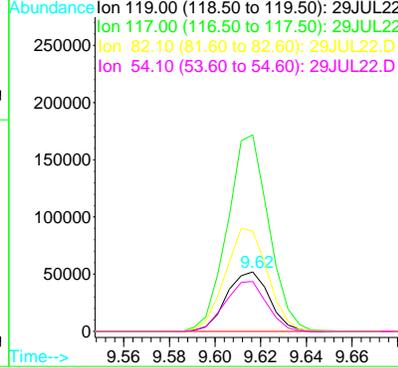
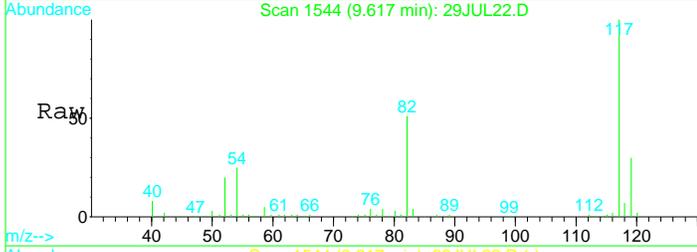
#32
 Toluene
 Concen: 0.11 ug/L
 RT: 8.65 min Scan# 1356
 Delta R.T. 0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

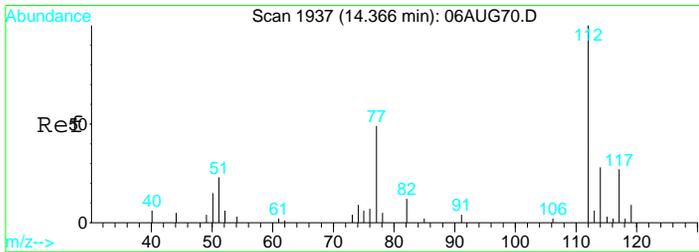
Tgt Ion	Resp	Lower	Upper
92	2455		
91	177.5	122.6	227.6
65	4.4	16.5	30.7#



#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.62 min Scan# 1544
 Delta R.T. 0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

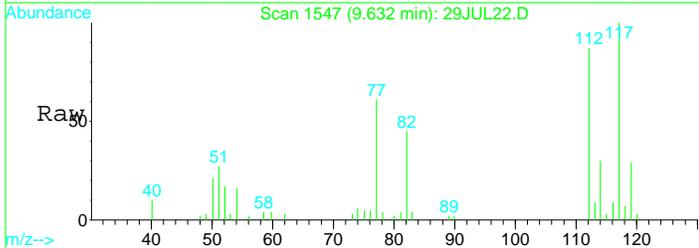
Tgt Ion	Resp	Lower	Upper
119	68034		
117	319.1	214.5	398.4
82	171.8	117.7	218.7
54	81.6	55.2	102.4



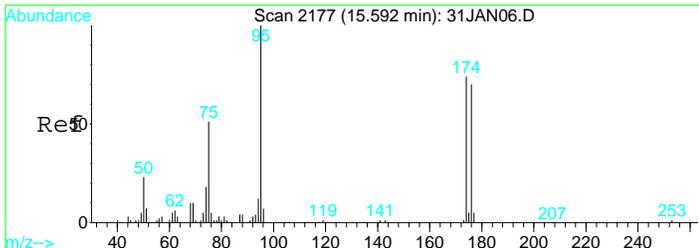
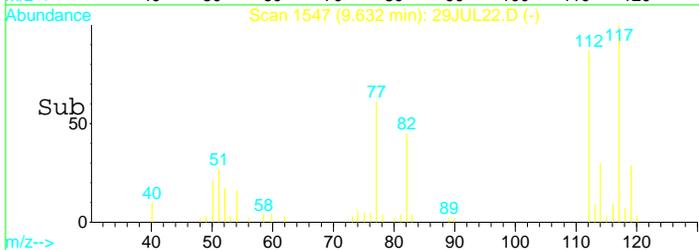
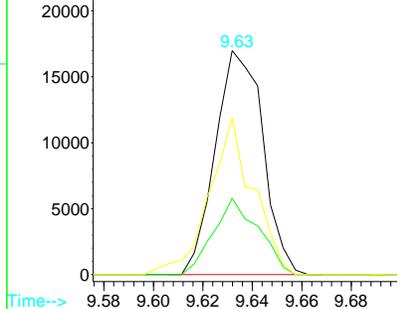


#40
 Chlorobenzene
 Concen: 1.01 ug/L
 RT: 9.63 min Scan# 1547
 Delta R.T. -0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

Tgt Ion	Resp	Lower	Upper
112	100		
114	32.4	20.6	38.4
77	64.5	48.4	90.0

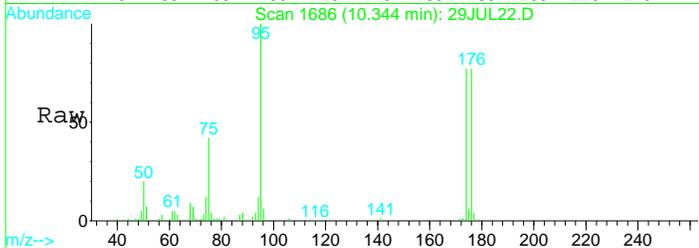


Abundance
 Ion 112.00 (111.50 to 112.50): 29JUL22.D
 Ion 114.00 (113.50 to 114.50): 29JUL22.D
 Ion 77.10 (76.60 to 77.60): 29JUL22.D

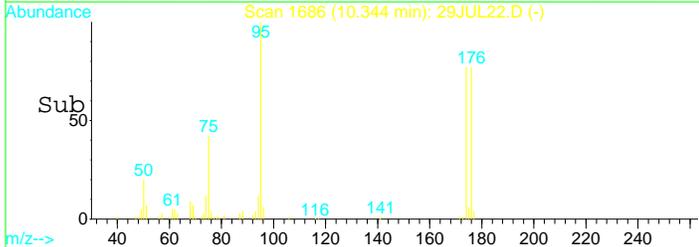
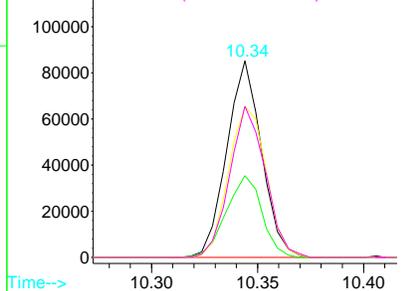


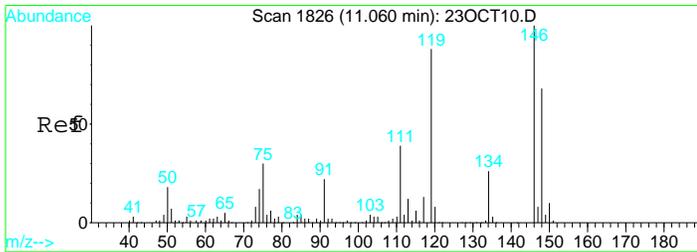
#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

Tgt Ion	Resp	Lower	Upper
95	100		
75	42.6	29.5	54.7
174	82.7	52.3	97.1
176	78.9	49.6	92.2



Abundance
 Ion 95.00 (94.50 to 95.50): 29JUL22.D
 Ion 75.00 (74.50 to 75.50): 29JUL22.D
 Ion 173.90 (173.40 to 174.40): 29JUL22.D
 Ion 175.90 (175.40 to 176.40): 29JUL22.D

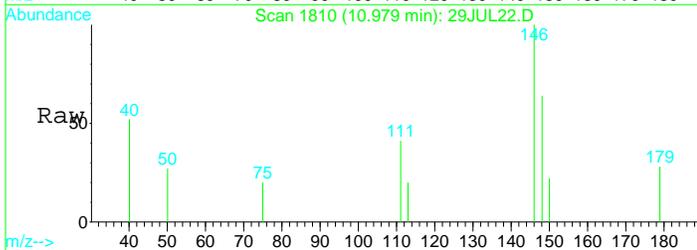




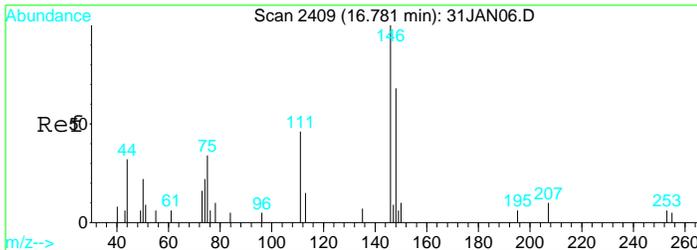
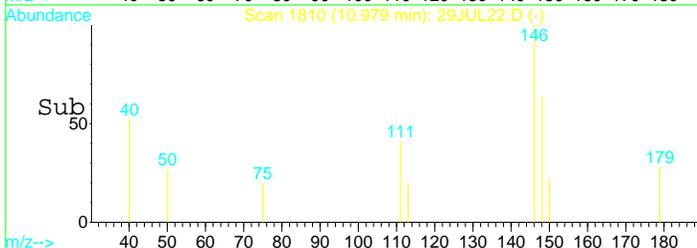
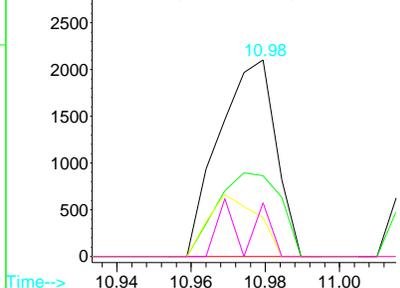
#60
 1,3-Dichlorobenzene
 Concen: 0.13 ug/L
 RT: 10.98 min Scan# 1810
 Delta R.T. 0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

Tgt Ion:146 Resp: 2239

Ion	Ratio	Lower	Upper
146	100		
111	47.3	28.8	53.6
75	27.3	24.0	44.6
50	16.4	14.6	27.0



Abundance Ion 146.00 (145.50 to 146.50): 29JUL22.
 Ion 111.00 (110.50 to 111.50): 29JUL22.
 Ion 75.00 (74.50 to 75.50): 29JUL22.D
 Ion 50.10 (49.60 to 50.60): 29JUL22.D

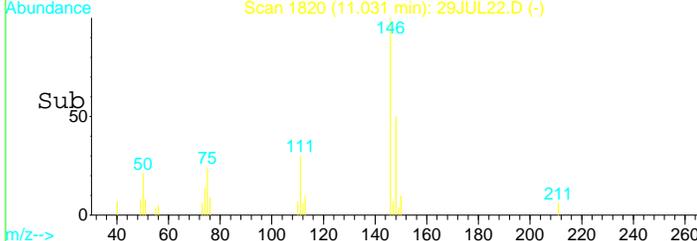
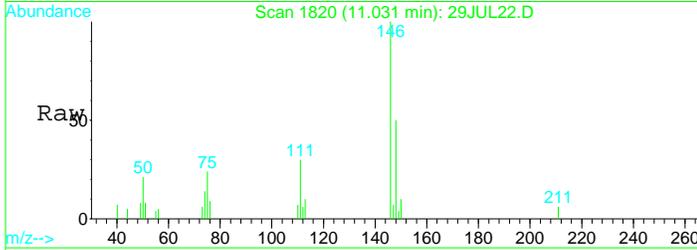
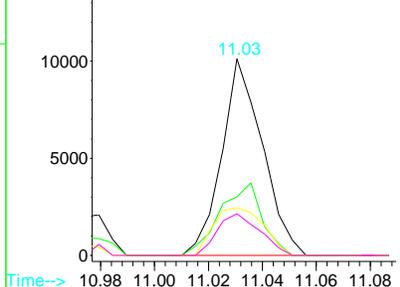


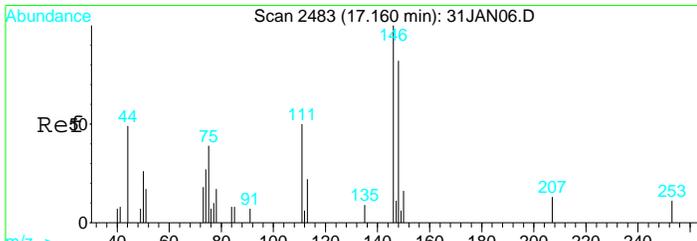
#61
 1,4-Dichlorobenzene
 Concen: 0.64 ug/L
 RT: 11.03 min Scan# 1820
 Delta R.T. -0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

Tgt Ion:146 Resp: 10610

Ion	Ratio	Lower	Upper
146	100		
111	38.0	28.1	52.3
75	28.7	20.3	37.7
50	22.2	16.0	29.6

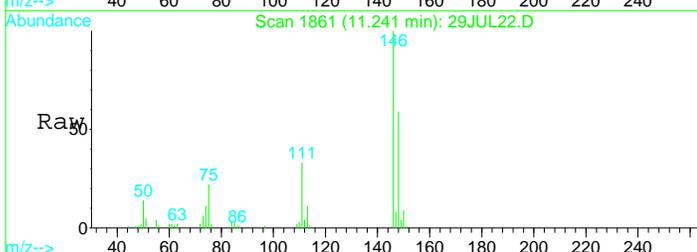
Abundance Ion 146.00 (145.50 to 146.50): 29JUL22.
 Ion 111.00 (110.50 to 111.50): 29JUL22.
 Ion 75.00 (74.50 to 75.50): 29JUL22.D
 Ion 50.10 (49.60 to 50.60): 29JUL22.D



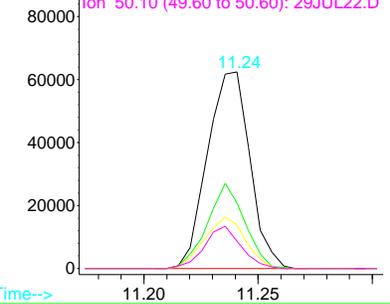
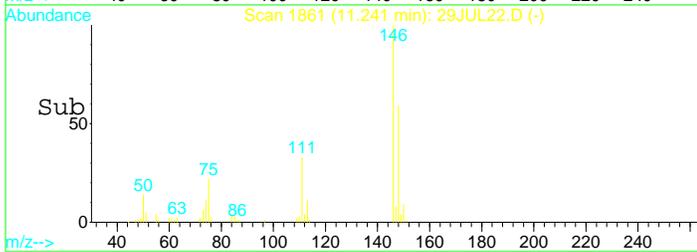


#63
 1,2-Dichlorobenzene
 Concen: 5.50 ug/L
 RT: 11.24 min Scan# 1861
 Delta R.T. 0.00 min
 Lab File: 29JUL22.D
 Acq: 29 Jul 2017 10:35 pm

Tgt Ion	Resp	Lower	Upper
146	100		
111	38.0	28.8	53.6
75	25.2	19.8	36.8
50	18.5	9.7	17.9



Abundance
 Ion 146.00 (145.50 to 146.50): 29JUL22.D
 Ion 111.00 (110.50 to 111.50): 29JUL22.D
 Ion 75.00 (74.50 to 75.50): 29JUL22.D
 Ion 50.10 (49.60 to 50.60): 29JUL22.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL22.D Vial: 22
 Acq On : 29 Jul 2017 10:35 pm Operator: MGC
 Sample : 1720405-10 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:48 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	180098	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	267208	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	68034	10.00	ug/L	0.00
Target Compounds						Qvalue
4) 1,2-dichlorotrifluoroethan	3.29	67	67075	5.65	ug/L	# 75

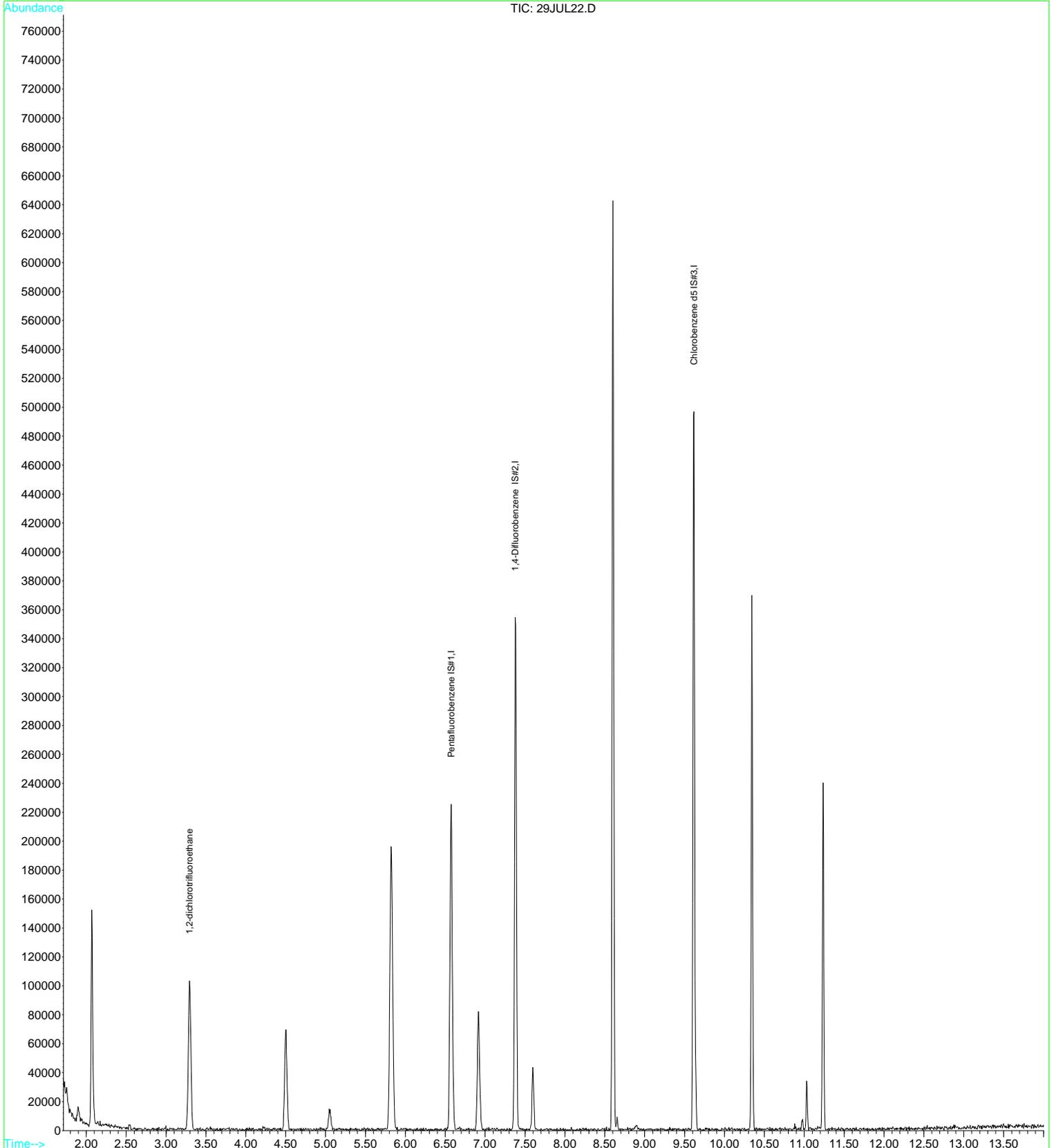
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL22.D
Acq On : 29 Jul 2017 10:35 pm
Sample : 1720405-10
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:48 2017

Vial: 22
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL23.D
 Acq On : 29 Jul 2017 10:58 pm
 Sample : 1720405-13
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:34 2017

Vial: 23
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	173202	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	252230	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	67952	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	54597	10.79	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	107.90%
31) Toluene d8 SMC#2	8.60	98	304772	9.78	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.80%
49) Bromofluorobenzene SMC#3	10.34	95	100876	9.94	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.40%

Target Compounds

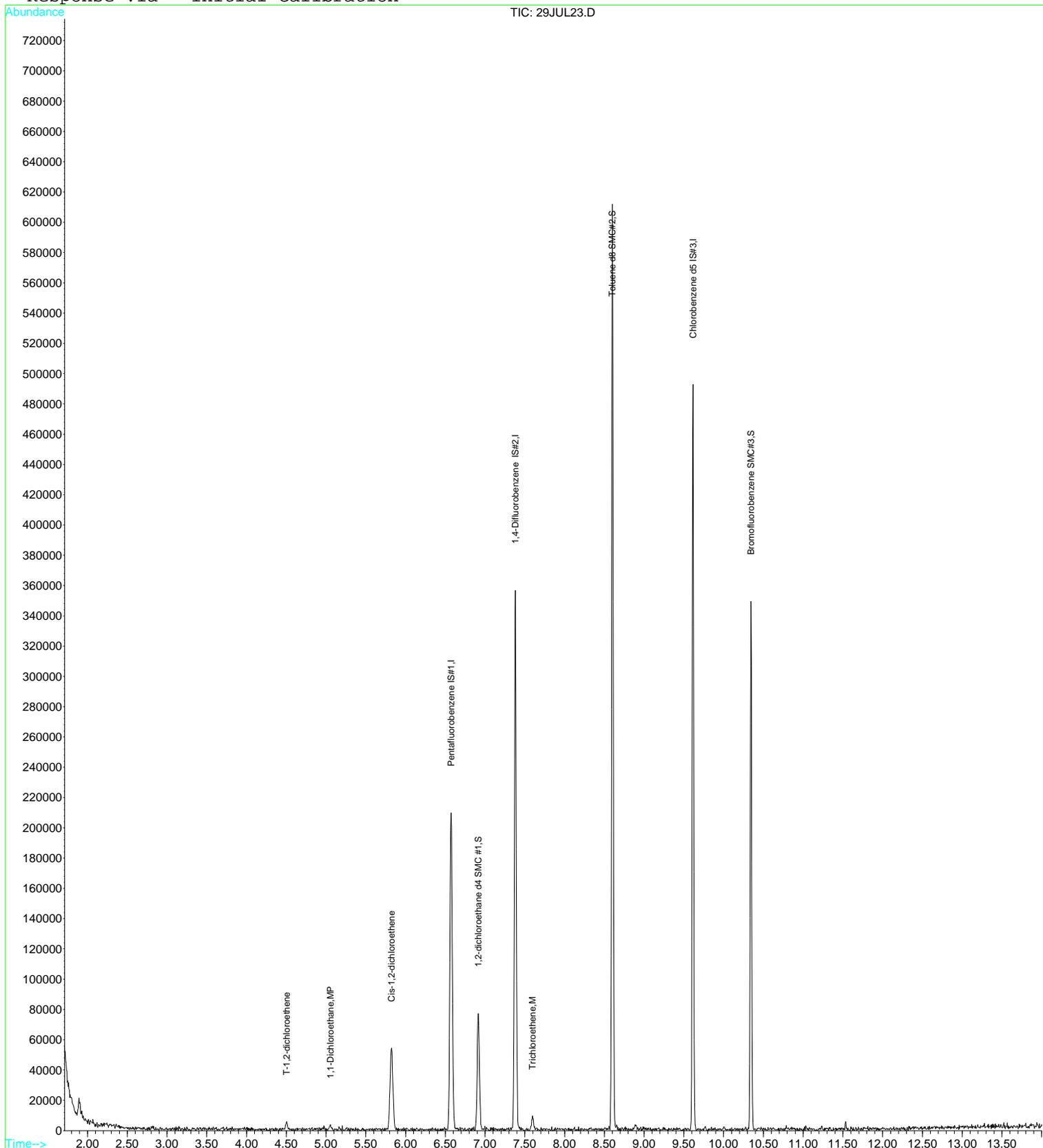
	R.T.	QIon	Response	Conc	Units	Qvalue
12) T-1,2-dichloroethene	4.50	96	1616	0.19	ug/L	82
13) 1,1-Dichloroethane	5.05	63	2752	0.15	ug/L	93
15) Cis-1,2-dichloroethene	5.82	96	29653	3.28	ug/L	90
25) Trichloroethene	7.60	130	3482	0.40	ug/L #	74

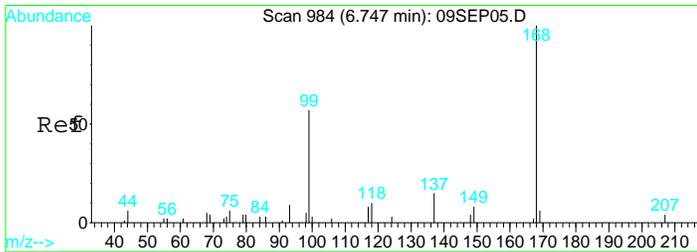
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL23.D
Acq On : 29 Jul 2017 10:58 pm
Sample : 1720405-13
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:34 2017

Vial: 23
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

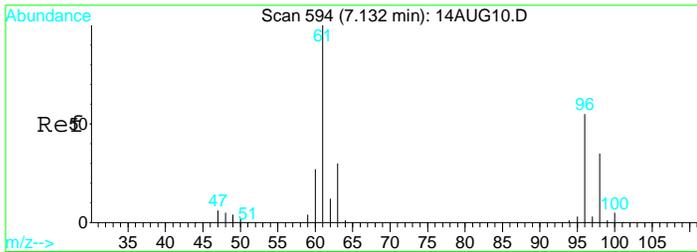
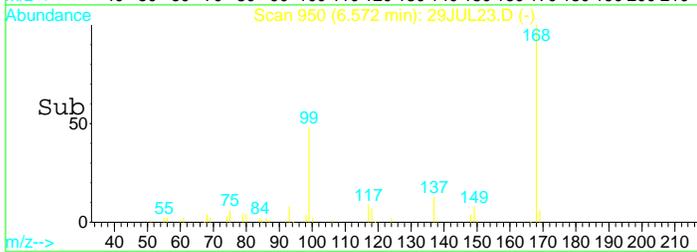
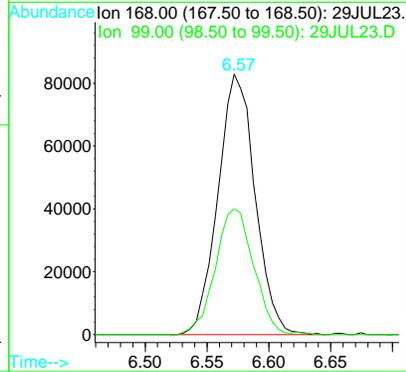
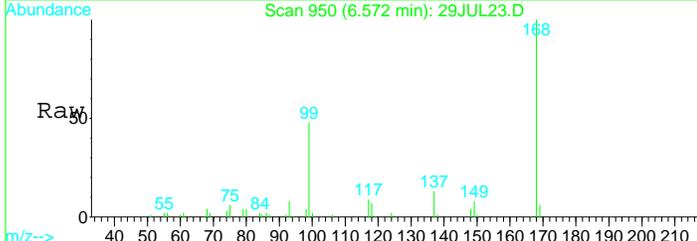
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





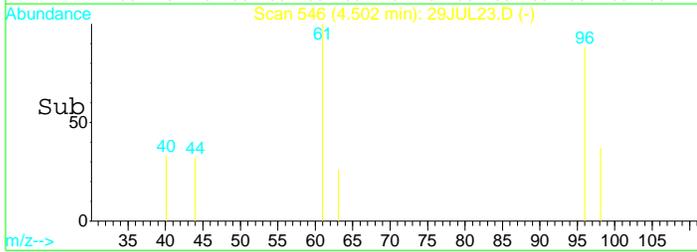
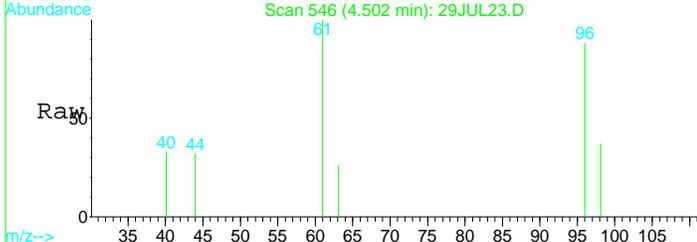
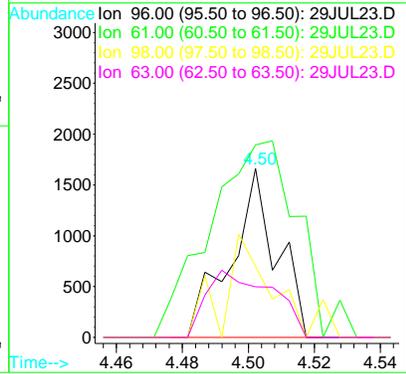
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL23.D
 Acq: 29 Jul 2017 10:58 pm

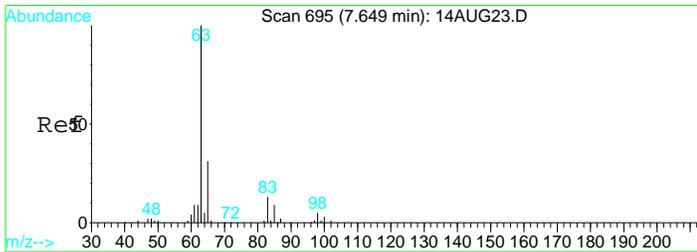
Tgt Ion	Resp	Lower	Upper
168	173202		
99	49.9	38.7	71.9



#12
 T-1,2-dichloroethene
 Concen: 0.19 ug/L
 RT: 4.50 min Scan# 546
 Delta R.T. 0.00 min
 Lab File: 29JUL23.D
 Acq: 29 Jul 2017 10:58 pm

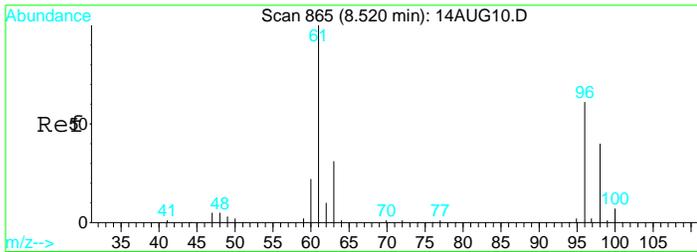
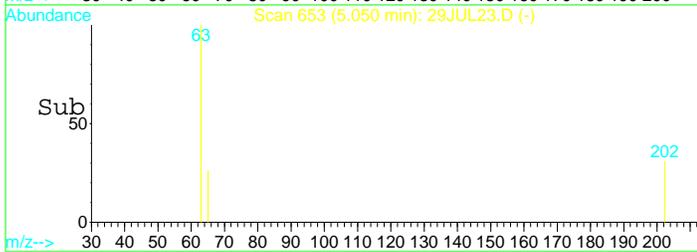
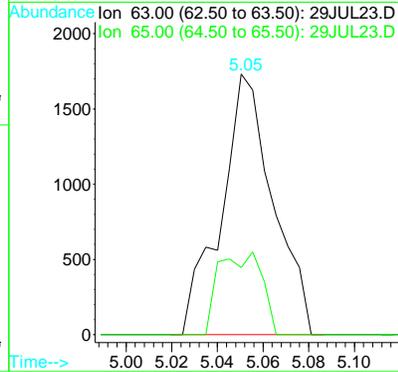
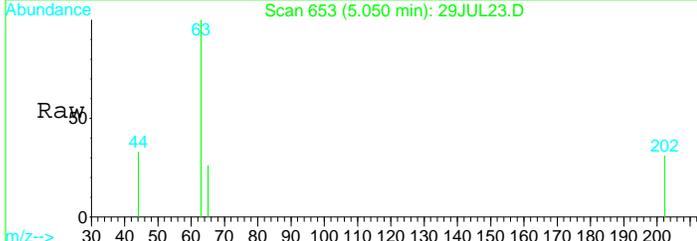
Tgt Ion	Resp	Lower	Upper
96	1616		
61	222.2	129.4	240.4
98	67.3	41.5	77.1
63	56.4	39.3	73.1





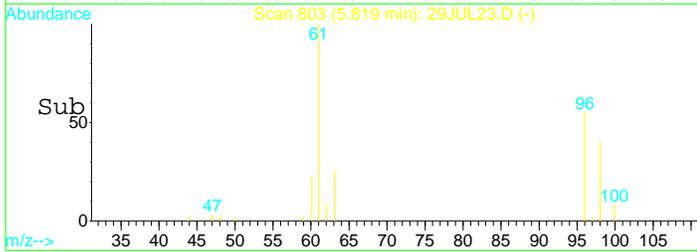
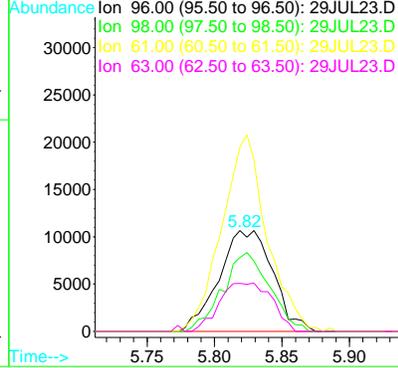
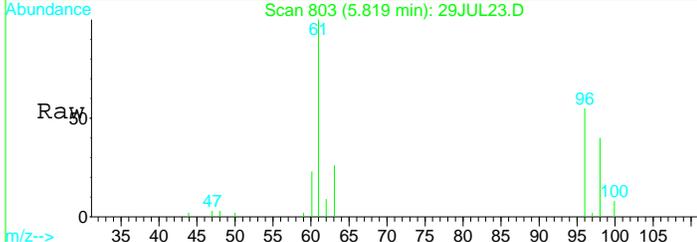
#13
 1,1-Dichloroethane
 Concen: 0.15 ug/L
 RT: 5.05 min Scan# 653
 Delta R.T. 0.00 min
 Lab File: 29JUL23.D
 Acq: 29 Jul 2017 10:58 pm

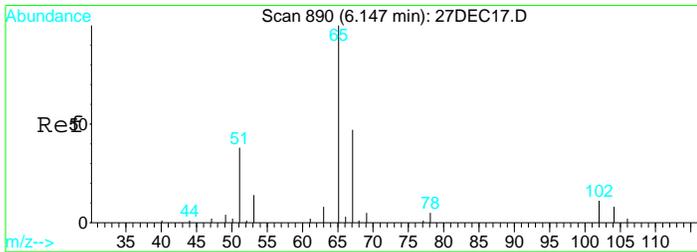
Tgt Ion	Resp	Lower	Upper
63	100		
65	26.1	20.8	38.6



#15
 Cis-1,2-dichloroethene
 Concen: 3.28 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 29JUL23.D
 Acq: 29 Jul 2017 10:58 pm

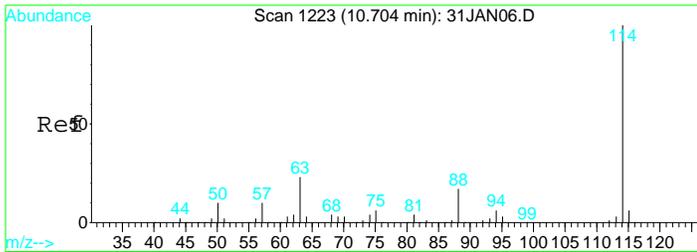
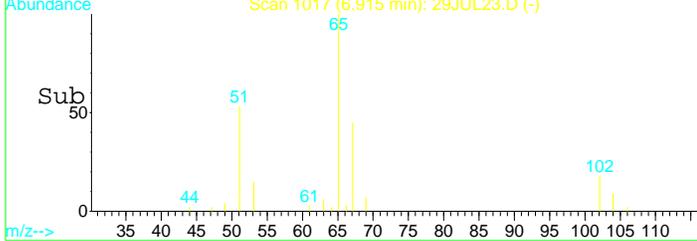
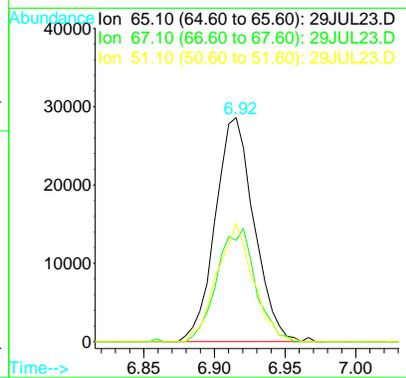
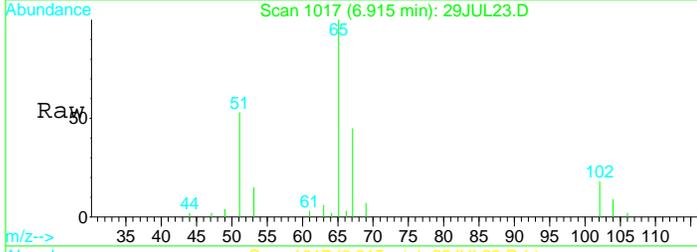
Tgt Ion	Resp	Lower	Upper
96	100		
98	67.8	51.9	96.3
61	162.7	122.8	228.0
63	46.6	42.1	78.3





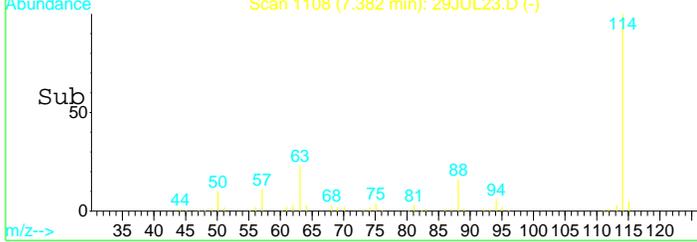
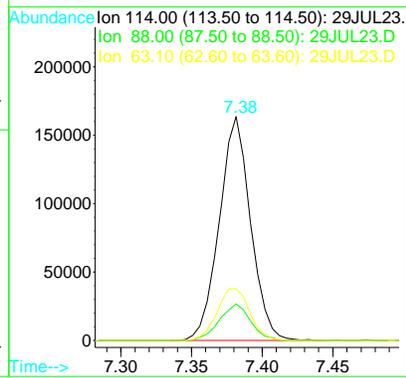
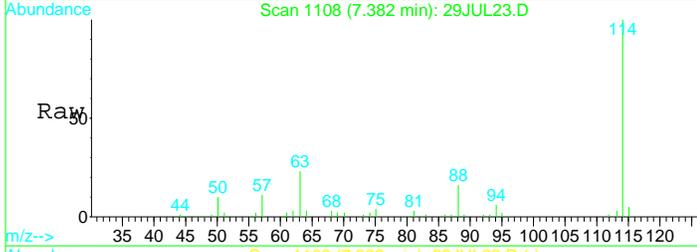
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1017
 Delta R.T. 0.00 min
 Lab File: 29JUL23.D
 Acq: 29 Jul 2017 10:58 pm

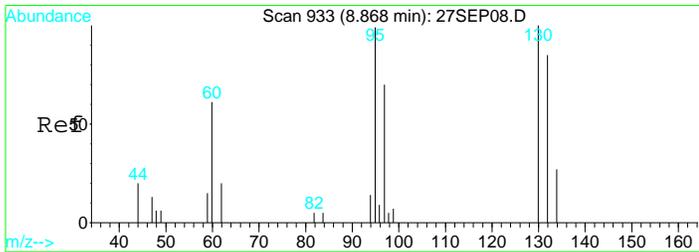
Tgt Ion	Resp	Lower	Upper
65	100		
67	50.1	36.2	67.2
51	49.4	42.0	78.0



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. 0.00 min
 Lab File: 29JUL23.D
 Acq: 29 Jul 2017 10:58 pm

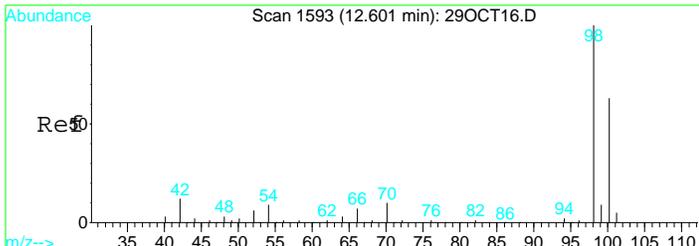
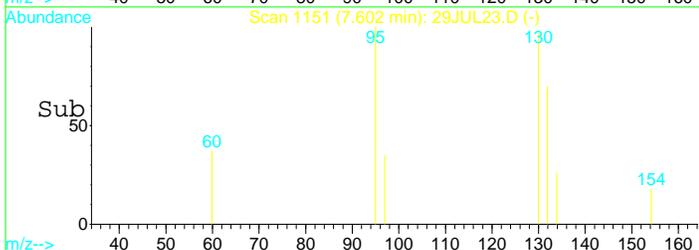
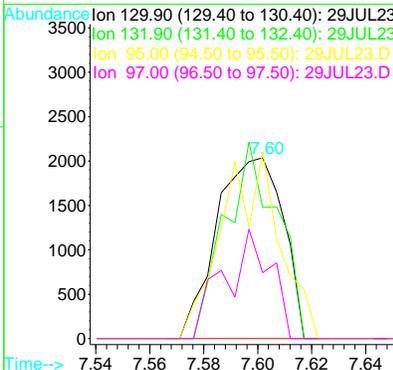
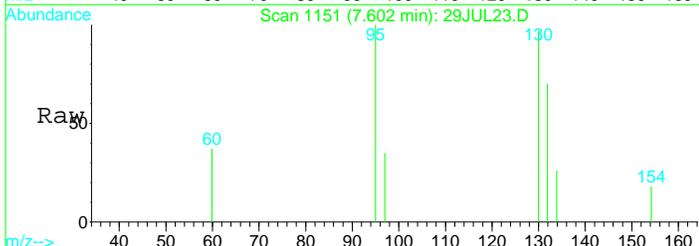
Tgt Ion	Resp	Lower	Upper
114	100		
88	16.3	11.7	21.7
63	24.3	16.7	30.9





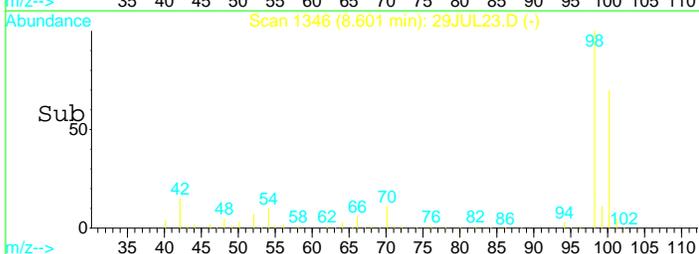
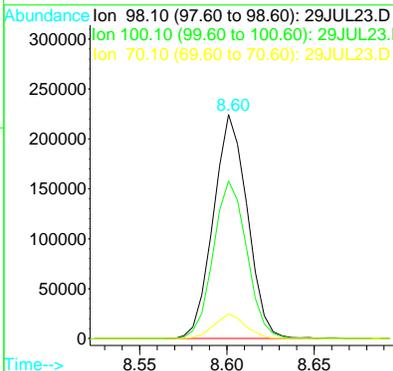
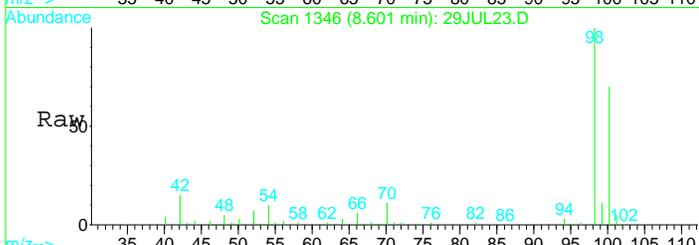
#25
 Trichloroethene
 Concen: 0.40 ug/L
 RT: 7.60 min Scan# 1151
 Delta R.T. 0.01 min
 Lab File: 29JUL23.D
 Acq: 29 Jul 2017 10:58 pm

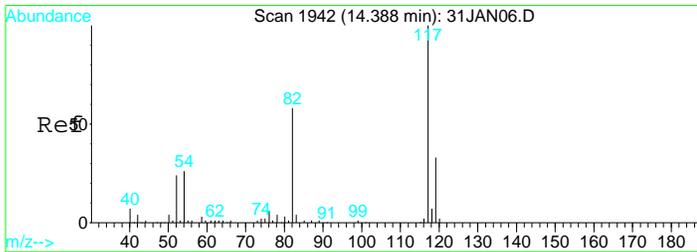
Tgt Ion	Resp	Lower	Upper
130	100		
132	85.2	66.1	122.7
95	88.5	86.1	159.9
97	41.7	52.8	98.0



#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL23.D
 Acq: 29 Jul 2017 10:58 pm

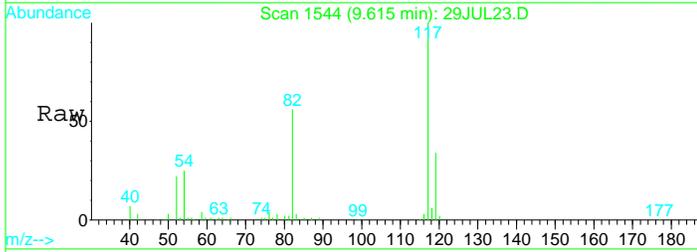
Tgt Ion	Resp	Lower	Upper
98	100		
100	69.2	49.7	92.3
70	10.2	7.3	13.7



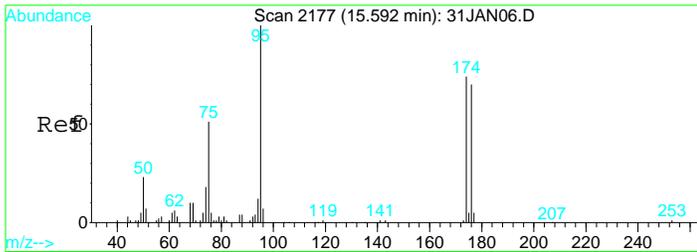
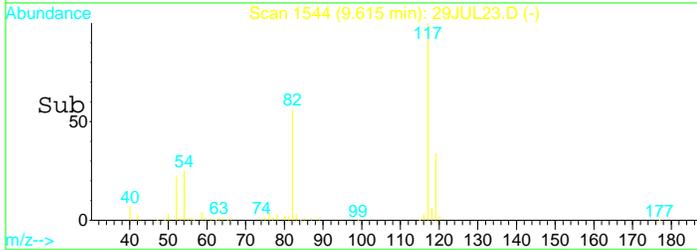
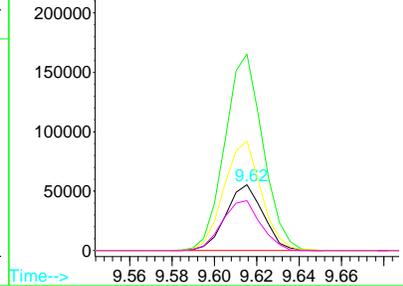


#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.62 min Scan# 1544
 Delta R.T. 0.00 min
 Lab File: 29JUL23.D
 Acq: 29 Jul 2017 10:58 pm

Tgt Ion	Resp	Lower	Upper
119	67952		
117	304.5	214.5	398.4
82	166.6	117.7	218.7
54	78.4	55.2	102.4

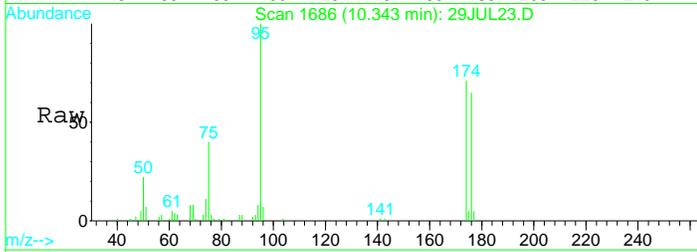


Abundance Ion 119.00 (118.50 to 119.50): 29JUL23.D
 Ion 117.00 (116.50 to 117.50): 29JUL23.D
 Ion 82.10 (81.60 to 82.60): 29JUL23.D
 Ion 54.10 (53.60 to 54.60): 29JUL23.D

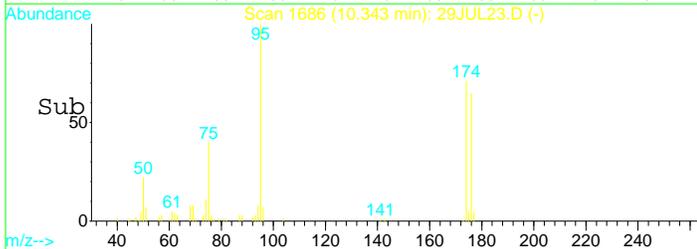
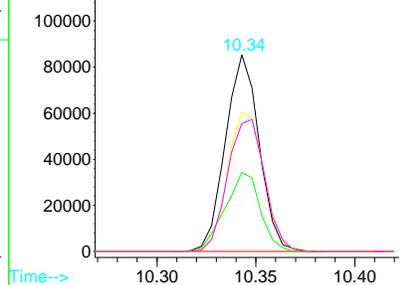


#49
 Bromofluorobenzene SMC#3
 Concen: Below ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL23.D
 Acq: 29 Jul 2017 10:58 pm

Tgt Ion	Resp	Lower	Upper
95	100876		
75	41.9	29.5	54.7
174	76.3	52.3	97.1
176	73.3	49.6	92.2



Abundance Ion 95.00 (94.50 to 95.50): 29JUL23.D
 Ion 75.00 (74.50 to 75.50): 29JUL23.D
 Ion 173.90 (173.40 to 174.40): 29JUL23.D
 Ion 175.90 (175.40 to 176.40): 29JUL23.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL23.D Vial: 23
 Acq On : 29 Jul 2017 10:58 pm Operator: MGC
 Sample : 1720405-13 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:48 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	173202	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	252230	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	67952	10.00	ug/L	0.00

Target Compounds Qvalue

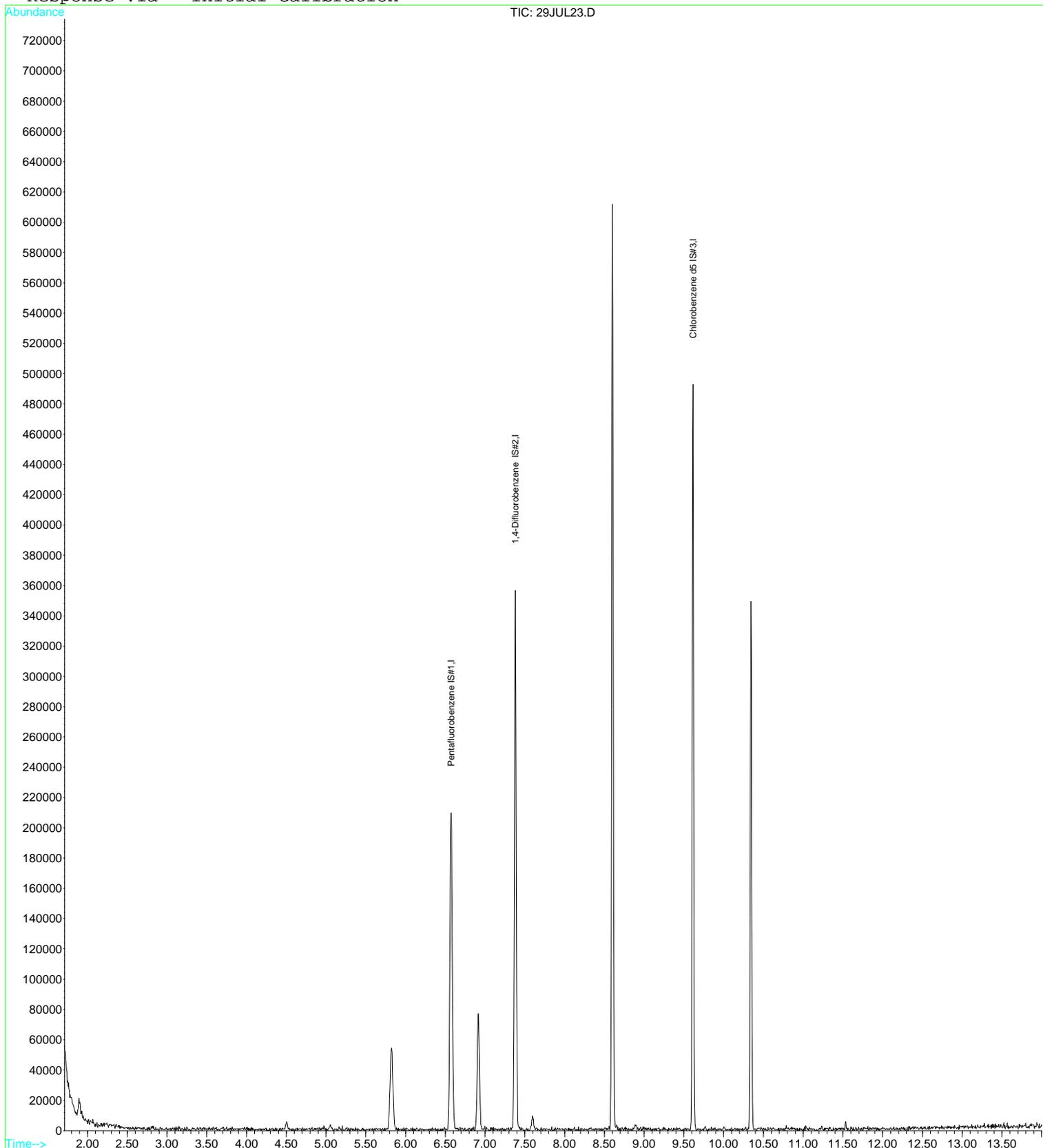
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL23.D
Acq On : 29 Jul 2017 10:58 pm
Sample : 1720405-13
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:48 2017

Vial: 23
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL24.D Vial: 24
 Acq On : 29 Jul 2017 11:21 pm Operator: MGC
 Sample : 1720405-14 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 30 5:35 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172209	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	260506	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	67555	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	53216	10.58	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	105.80%
31) Toluene d8 SMC#2	8.60	98	304633	9.47	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.70%
49) Bromofluorobenzene SMC#3	10.34	95	97302	9.65	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.50%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	2614	0.20	ug/L	# 68
12) T-1,2-dichloroethene	4.50	96	3392	0.39	ug/L	83
15) Cis-1,2-dichloroethene	5.83	96	72453	8.06	ug/L	92
25) Trichloroethene	7.59	130	3332	0.37	ug/L	89
63) 1,2-Dichlorobenzene	11.23	146	1681	0.12	ug/L	95

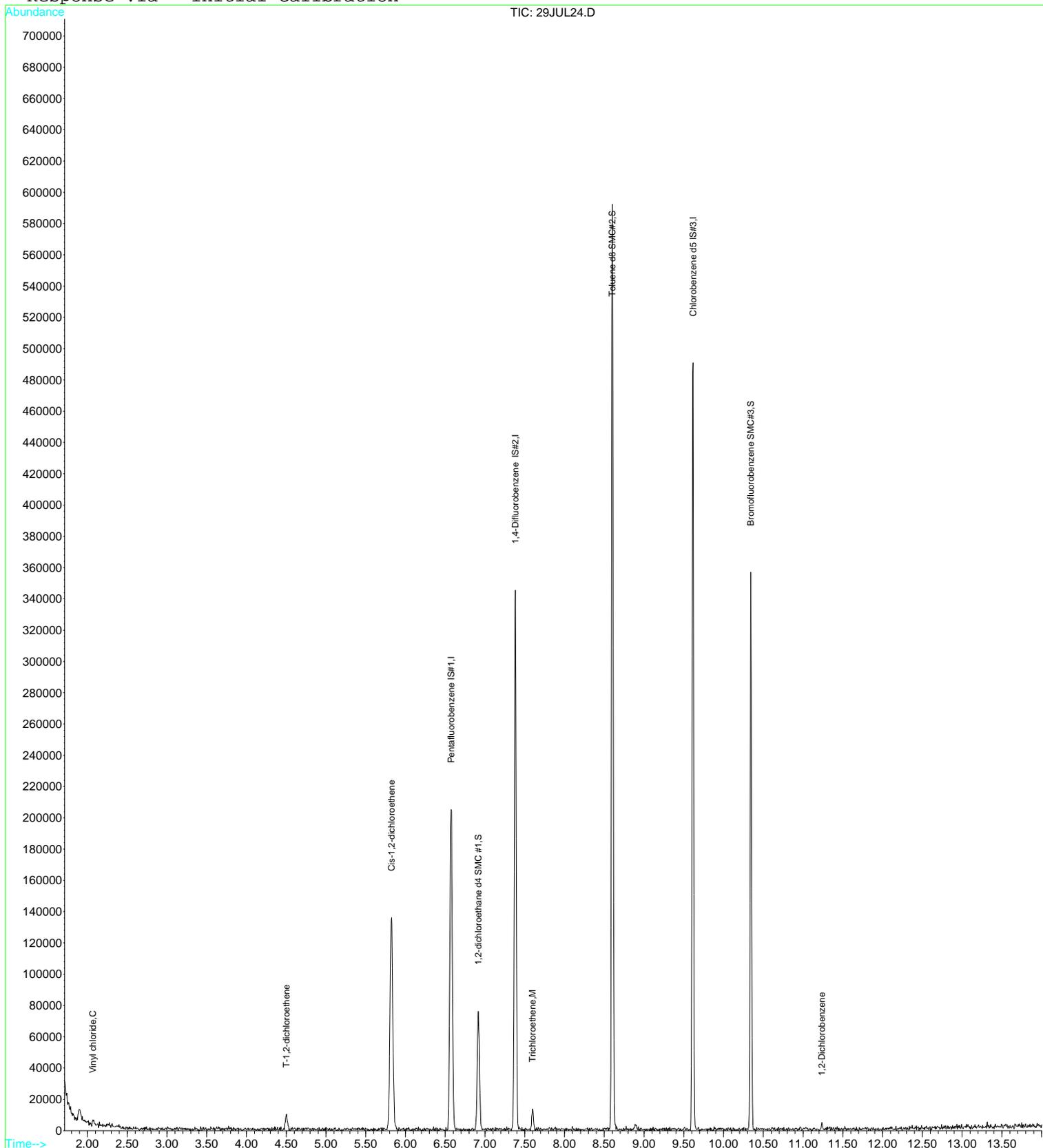
(#) = qualifier out of range (m) = manual integration

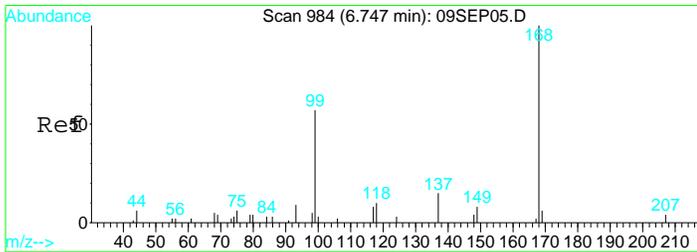
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL24.D
Acq On : 29 Jul 2017 11:21 pm
Sample : 1720405-14
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:35 2017

Vial: 24
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

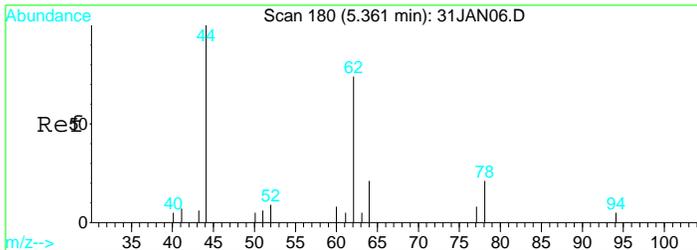
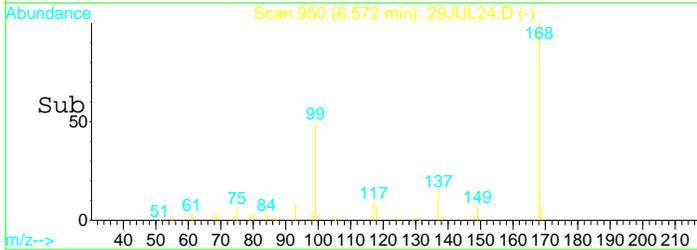
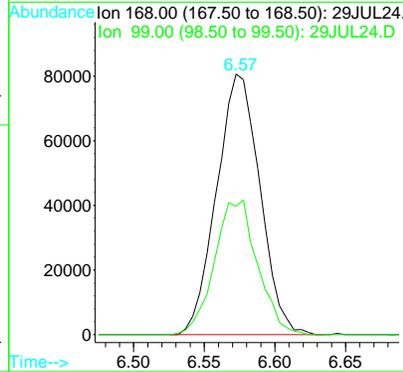
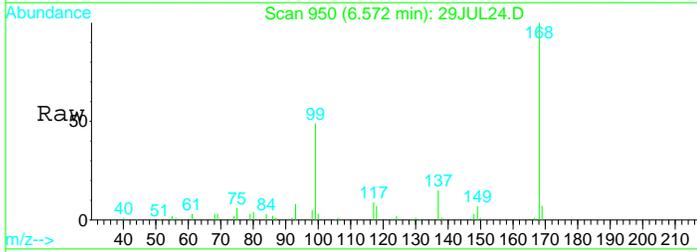
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





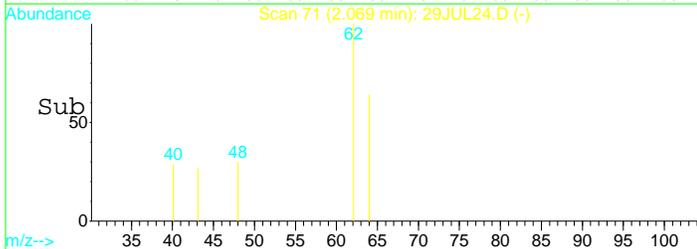
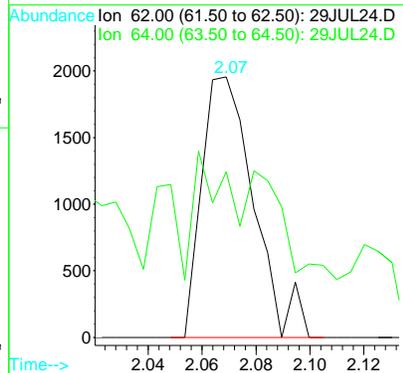
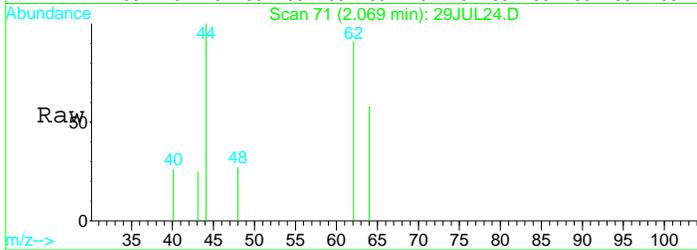
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

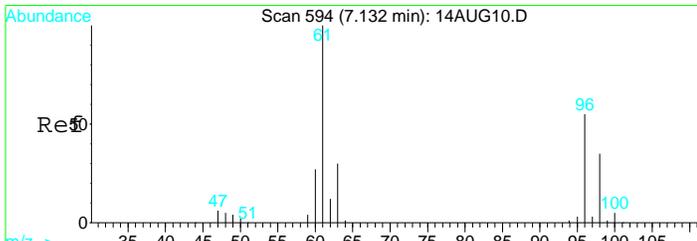
Tgt Ion	Resp	Lower	Upper
168	100		
99	51.1	38.7	71.9



#4
 Vinyl chloride
 Concen: 0.20 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

Tgt Ion	Resp	Lower	Upper
62	100		
64	32.6	39.3	72.9#

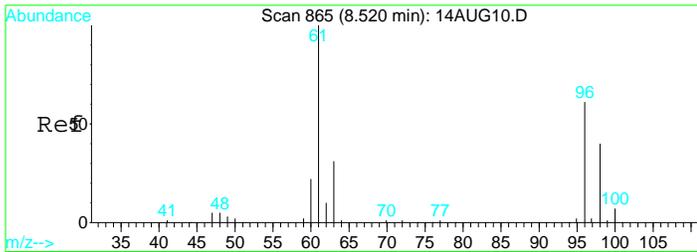
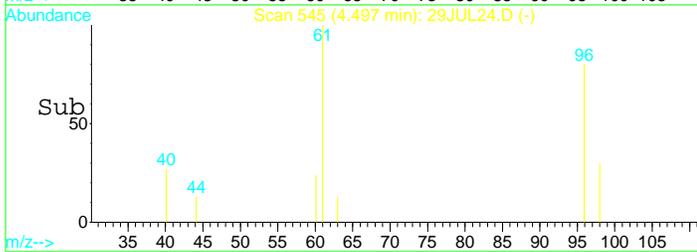
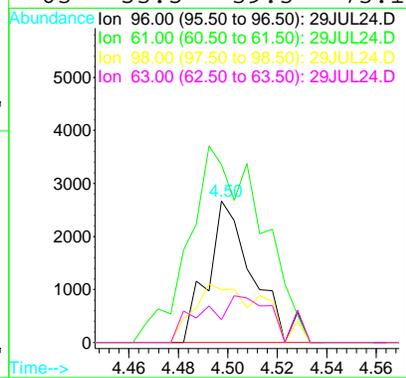
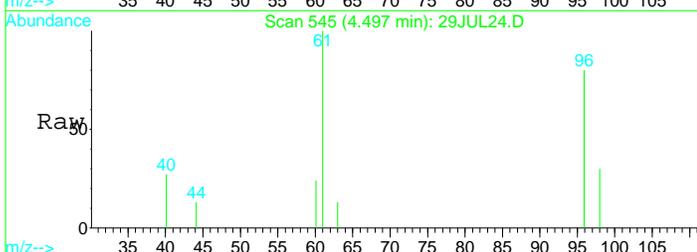




#12
 T-1,2-dichloroethene
 Concen: 0.39 ug/L
 RT: 4.50 min Scan# 545
 Delta R.T. -0.00 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

Tgt Ion: 96 Resp: 3392

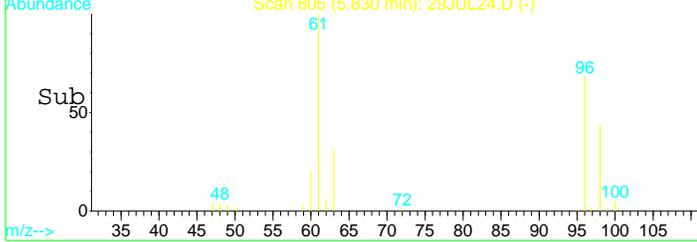
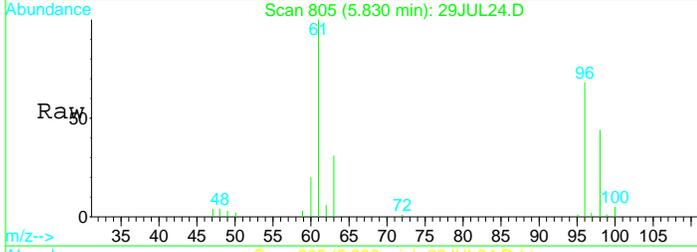
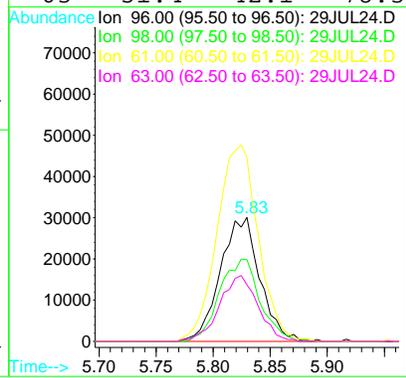
Ion	Ratio	Lower	Upper
96	100		
61	221.6	129.4	240.4
98	62.8	41.5	77.1
63	53.5	39.3	73.1

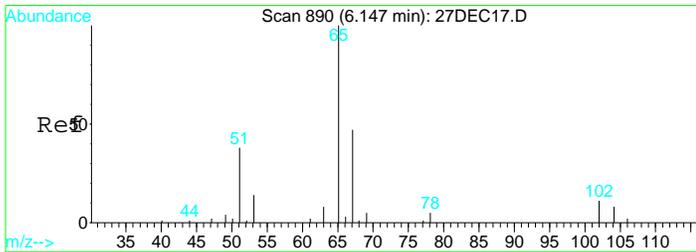


#15
 Cis-1,2-dichloroethene
 Concen: 8.06 ug/L
 RT: 5.83 min Scan# 805
 Delta R.T. 0.01 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

Tgt Ion: 96 Resp: 72453

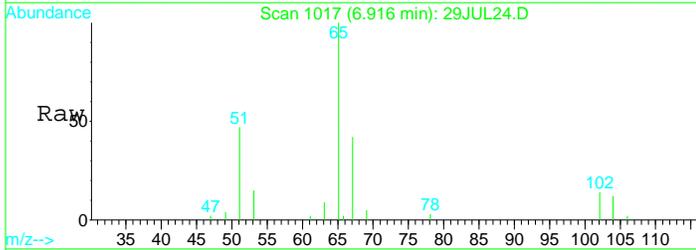
Ion	Ratio	Lower	Upper
96	100		
98	67.6	51.9	96.3
61	165.1	122.8	228.0
63	51.4	42.1	78.3



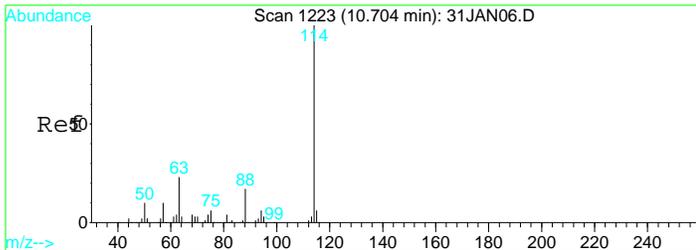
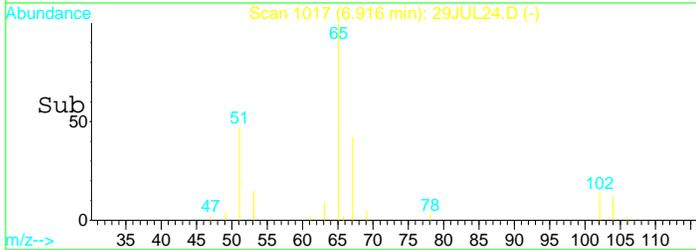
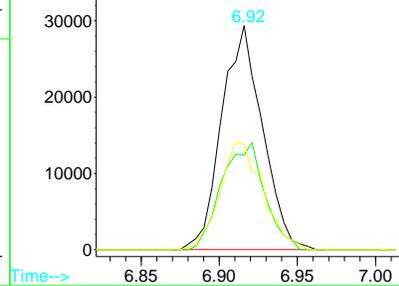


#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1017
 Delta R.T. 0.00 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

Tgt Ion	Resp	Lower	Upper
65	100		
67	50.5	36.2	67.2
51	51.0	42.0	78.0

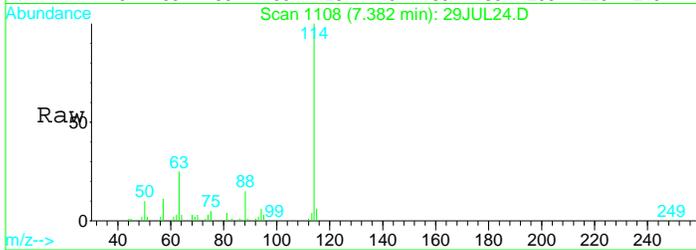


Abundance Ion 65.10 (64.60 to 65.60): 29JUL24.D
 Ion 67.10 (66.60 to 67.60): 29JUL24.D
 Ion 51.10 (50.60 to 51.60): 29JUL24.D

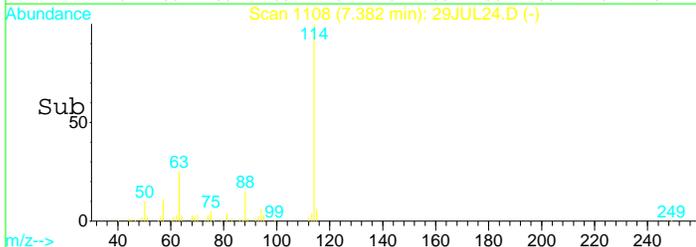
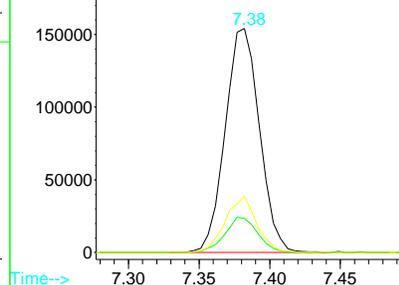


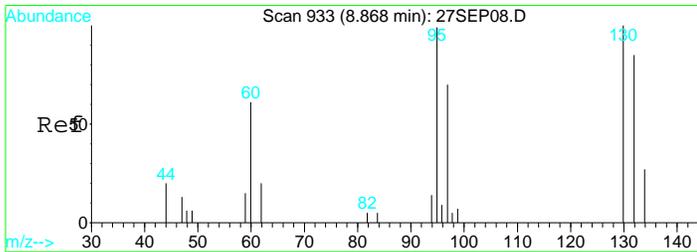
#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. 0.00 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

Tgt Ion	Resp	Lower	Upper
114	100		
88	15.2	11.7	21.7
63	23.1	16.7	30.9



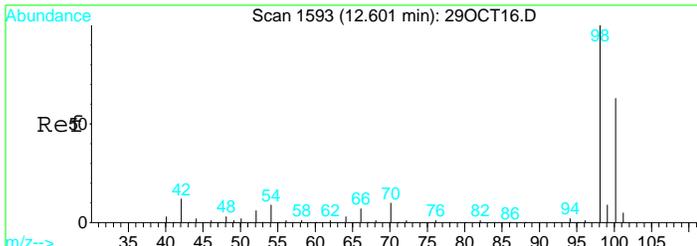
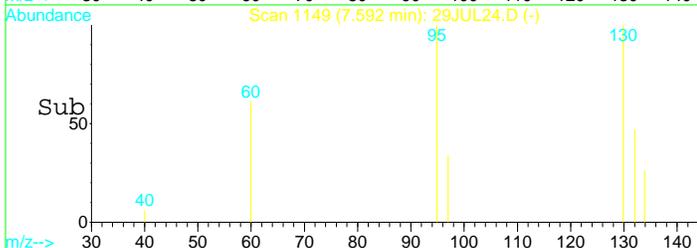
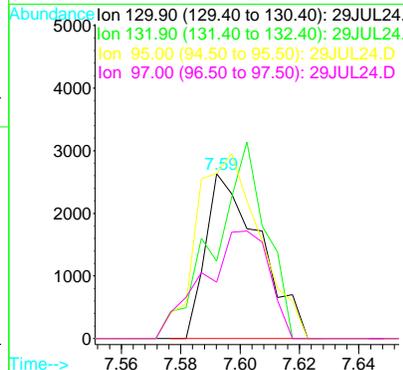
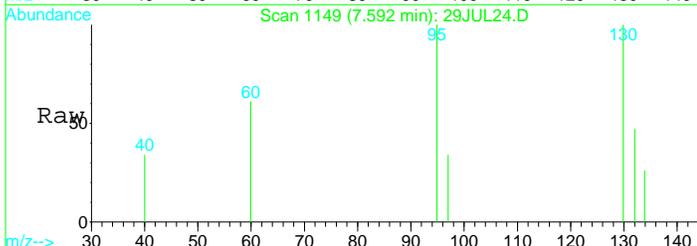
Abundance Ion 114.00 (113.50 to 114.50): 29JUL24.D
 Ion 88.00 (87.50 to 88.50): 29JUL24.D
 Ion 63.10 (62.60 to 63.60): 29JUL24.D





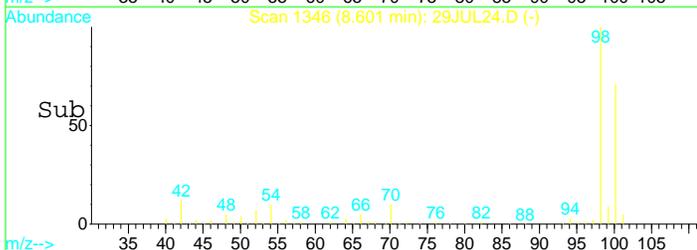
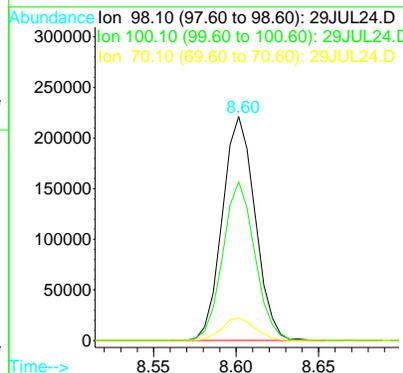
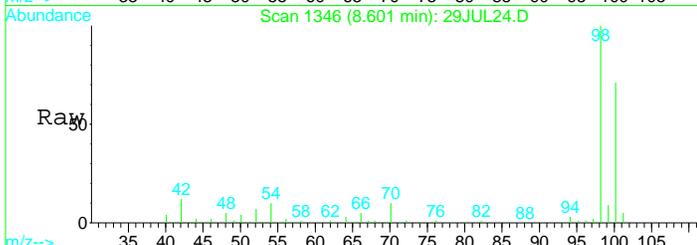
#25
 Trichloroethene
 Concen: 0.37 ug/L
 RT: 7.59 min Scan# 1149
 Delta R.T. -0.00 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

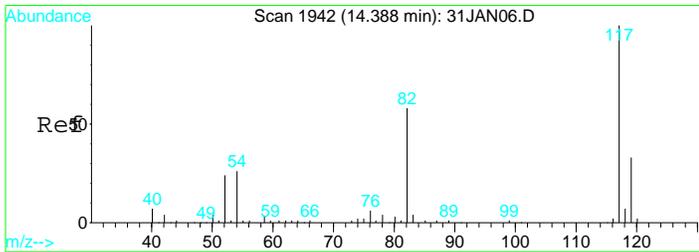
Tgt Ion	Resp	Lower	Upper
130	3332		
130	100		
132	113.8	66.1	122.7
95	131.6	86.1	159.9
97	79.4	52.8	98.0



#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

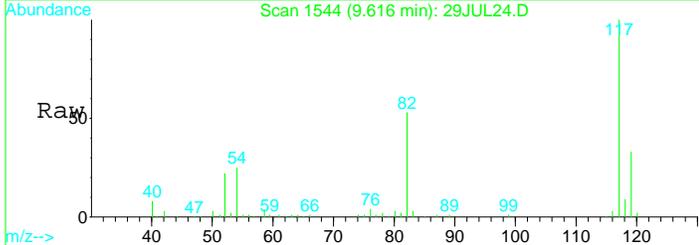
Tgt Ion	Resp	Lower	Upper
98	304633		
98	100		
100	69.2	49.7	92.3
70	10.3	7.3	13.7



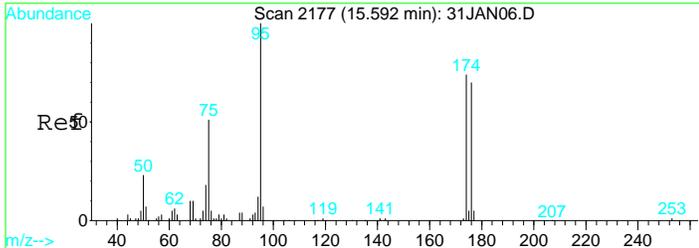
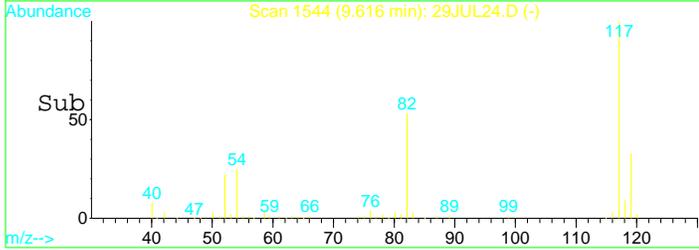
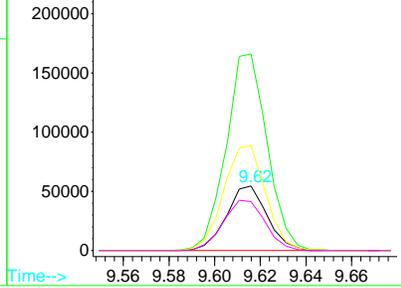


#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.62 min Scan# 1544
 Delta R.T. 0.00 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

Tgt Ion	Resp	Lower	Upper
119	67555		
117	306.7	214.5	398.4
82	167.9	117.7	218.7
54	80.3	55.2	102.4

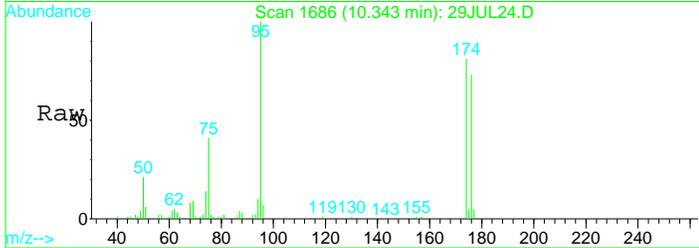


Abundance
 Ion 119.00 (118.50 to 119.50): 29JUL24.D
 Ion 117.00 (116.50 to 117.50): 29JUL24.D
 Ion 82.10 (81.60 to 82.60): 29JUL24.D
 Ion 54.10 (53.60 to 54.60): 29JUL24.D

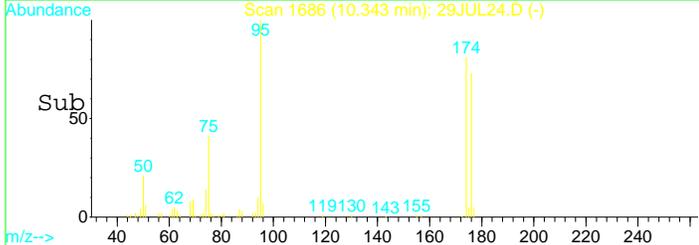
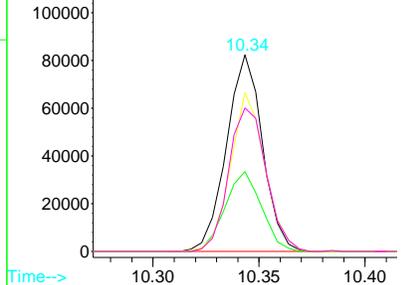


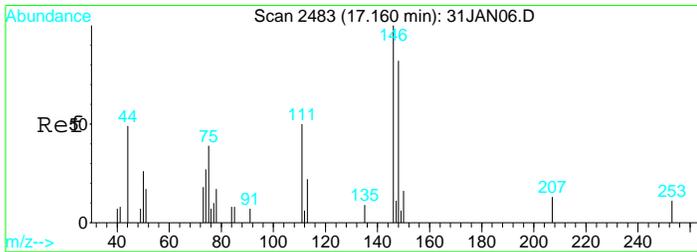
#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

Tgt Ion	Resp	Lower	Upper
95	97302		
95	100		
75	41.0	29.5	54.7
174	77.3	52.3	97.1
176	76.4	49.6	92.2



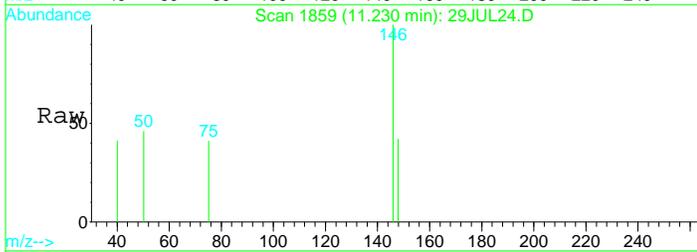
Abundance
 Ion 95.00 (94.50 to 95.50): 29JUL24.D
 Ion 75.00 (74.50 to 75.50): 29JUL24.D
 Ion 173.90 (173.40 to 174.40): 29JUL24.D
 Ion 175.90 (175.40 to 176.40): 29JUL24.D



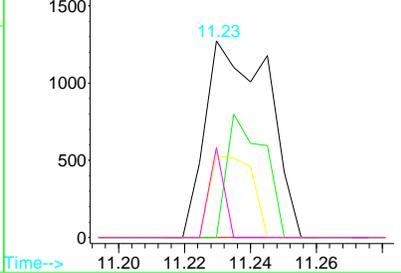
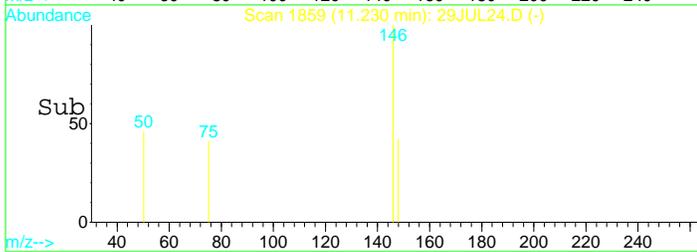


#63
 1,2-Dichlorobenzene
 Concen: 0.12 ug/L
 RT: 11.23 min Scan# 1859
 Delta R.T. -0.01 min
 Lab File: 29JUL24.D
 Acq: 29 Jul 2017 11:21 pm

Tgt Ion	Resp	Lower	Upper
146	1681		
111	36.6	28.8	53.6
75	27.5	19.8	36.8
50	10.6	9.7	17.9



Abundance
 Ion 146.00 (145.50 to 146.50): 29JUL24.D
 Ion 111.00 (110.50 to 111.50): 29JUL24.D
 Ion 75.00 (74.50 to 75.50): 29JUL24.D
 Ion 50.10 (49.60 to 50.60): 29JUL24.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL24.D Vial: 24
 Acq On : 29 Jul 2017 11:21 pm Operator: MGC
 Sample : 1720405-14 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:56 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172209	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	260506	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	67555	10.00	ug/L	0.00

Target Compounds Qvalue

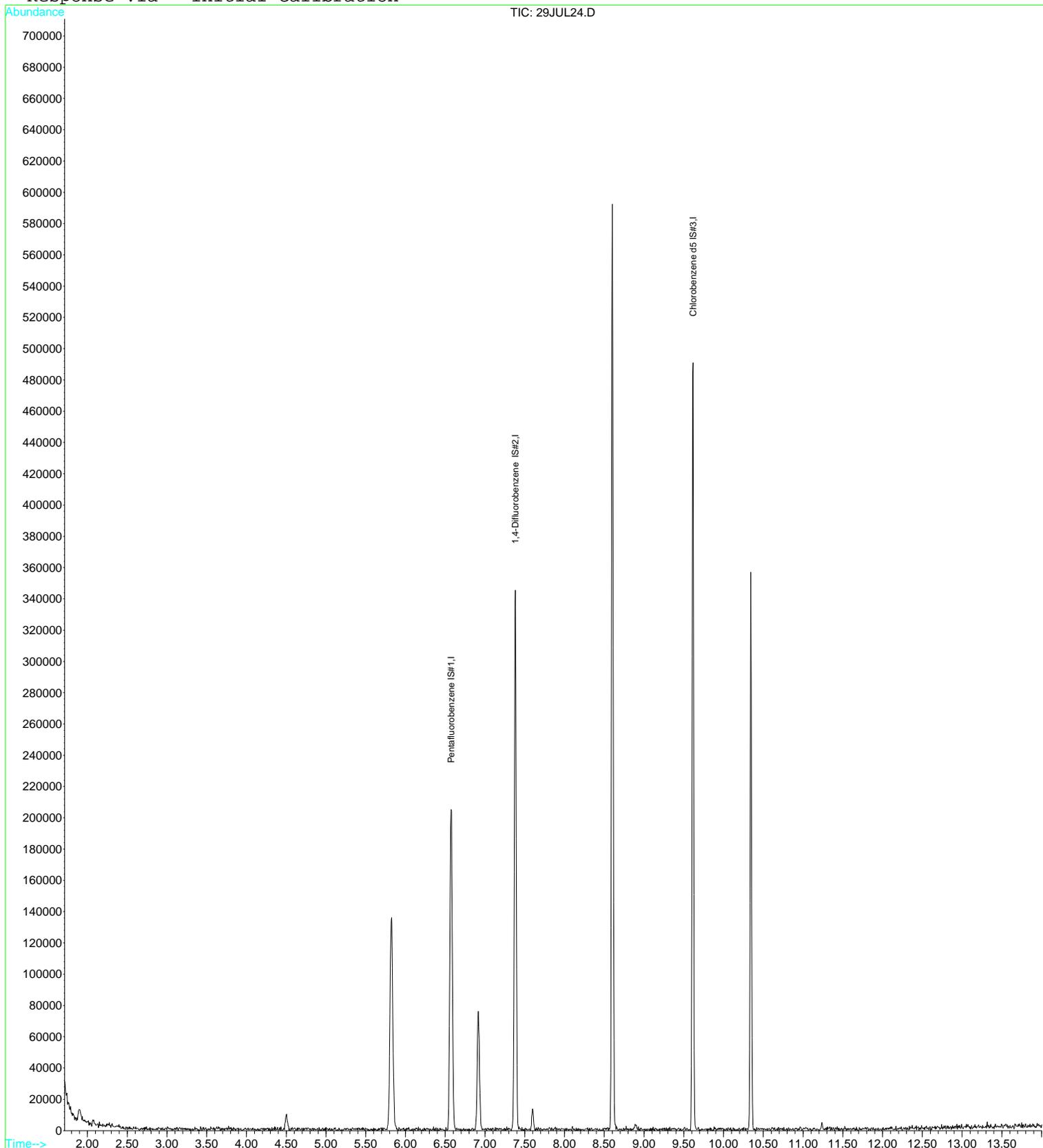
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL24.D
Acq On : 29 Jul 2017 11:21 pm
Sample : 1720405-14
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:56 2017

Vial: 24
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL10.D
 Acq On : 29 Jul 2017 5:59 pm
 Sample : 1720405-15
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:23 2017

Vial: 10
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	179580	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	259780	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	69430	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	53524	10.20	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	102.00%
31) Toluene d8 SMC#2	8.60	98	316413	9.86	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.60%
49) Bromofluorobenzene SMC#3	10.34	95	102492	9.89	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.90%

Target Compounds

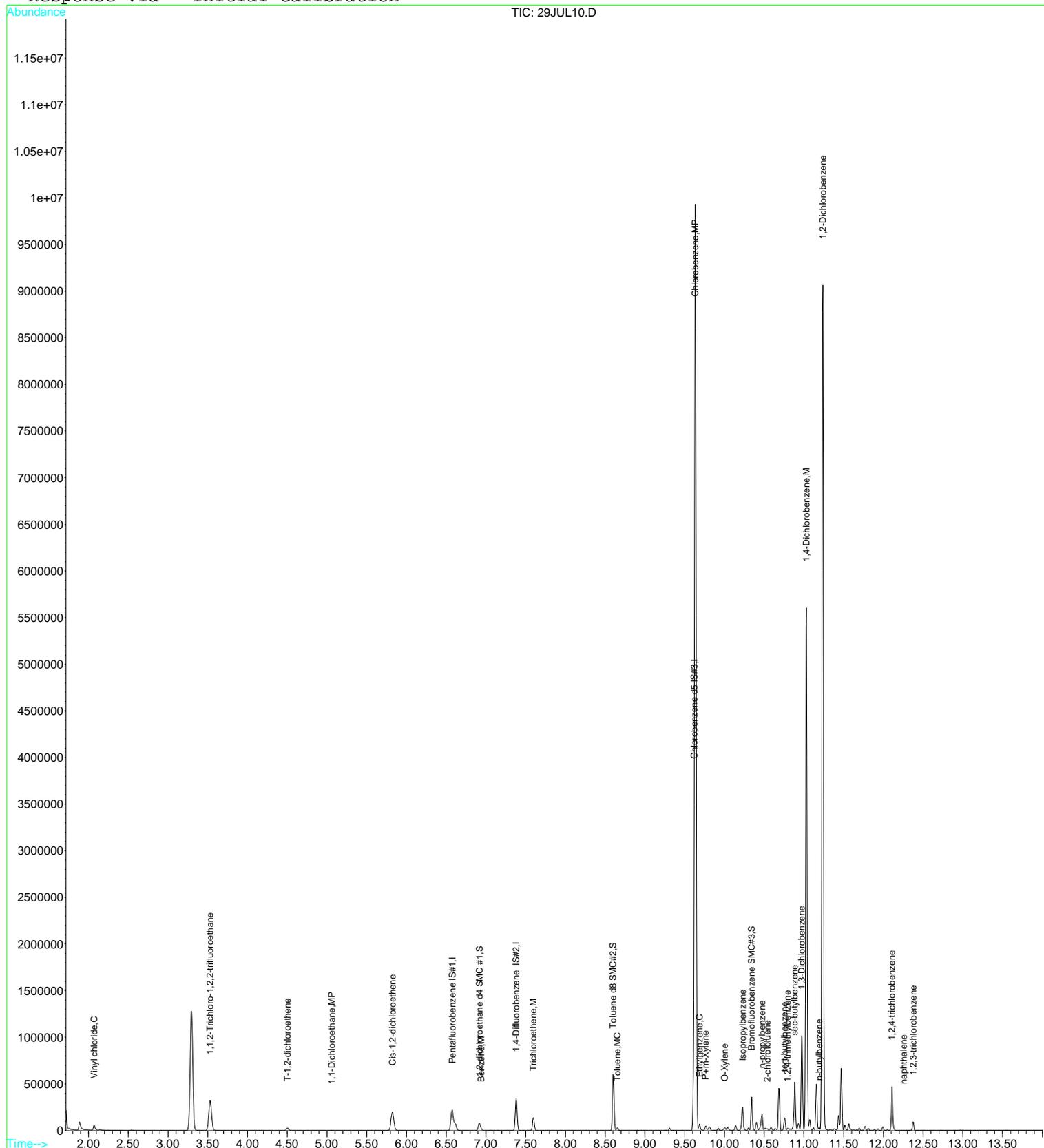
	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	52358	3.89	ug/L #	76
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	172838	22.76	ug/L #	85
12) T-1,2-dichloroethene	4.50	96	11683	1.30	ug/L	92
13) 1,1-Dichloroethane	5.05	63	2114	0.11	ug/L #	56
15) Cis-1,2-dichloroethene	5.82	96	112087	11.95	ug/L	87
23) Benzene	6.94	78	10737	0.29	ug/L #	34
25) Trichloroethene	7.60	130	40462	4.54	ug/L	88
32) Toluene	8.66	92	11506	0.51	ug/L	99
40) Chlorobenzene	9.63	112	4299698	186.75	ug/L #	92
42) Ethylbenzene	9.69	106	6435	0.48	ug/L	99
43) P+m-Xylene	9.77	106	1740	0.11	ug/L #	46
44) O-Xylene	10.01	106	5025	0.33	ug/L #	83
47) Isopropylbenzene	10.23	105	121103	3.06	ug/L	97
51) n-propylbenzene	10.48	91	96015	1.87	ug/L	97
54) 2-chlorotoluene	10.54	91	3586	0.11	ug/L	95
56) tert-butylbenzene	10.76	119	33433	1.03	ug/L	96
57) 1,2,4-trimethylbenzene	10.79	105	6856	0.21	ug/L	90
58) sec-butylbenzene	10.88	105	264071	6.02	ug/L	92
60) 1,3-Dichlorobenzene	10.98	146	354278	20.41	ug/L	91
61) 1,4-Dichlorobenzene	11.03	146	1879864	110.82	ug/L	97
62) n-butylbenzene	11.19	91	12191	0.37	ug/L #	86
63) 1,2-Dichlorobenzene	11.24	146	3068878	204.96	ug/L #	95
66) 1,2,4-trichlorobenzene	12.11	180	108605	12.52	ug/L	98
68) naphthalene	12.26	128	1318	0.12	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	23887	3.28	ug/L #	88

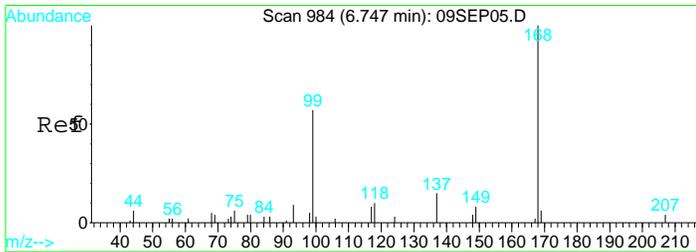
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL10.D
Acq On : 29 Jul 2017 5:59 pm
Sample : 1720405-15
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:23 2017

Vial: 10
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

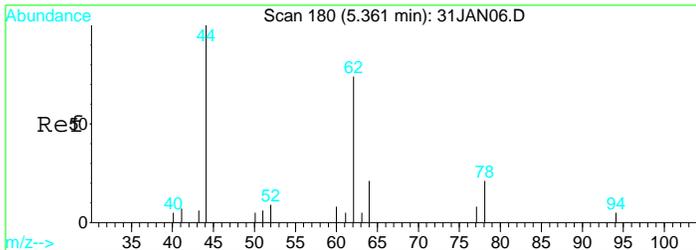
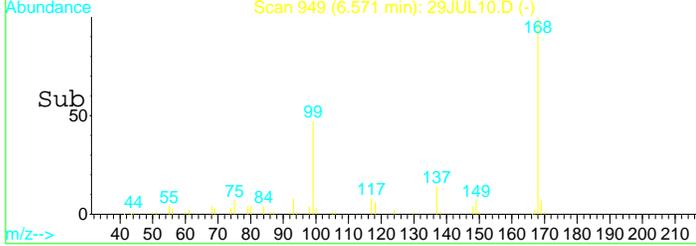
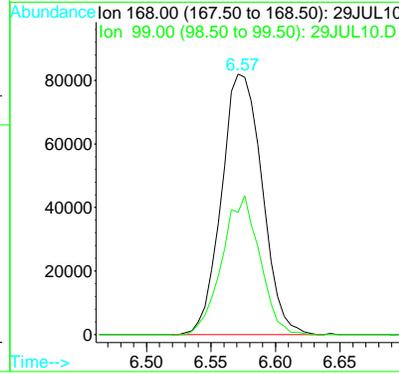
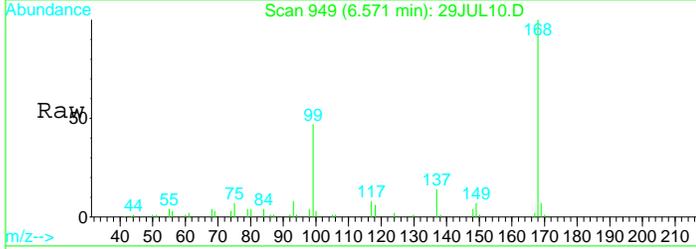
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





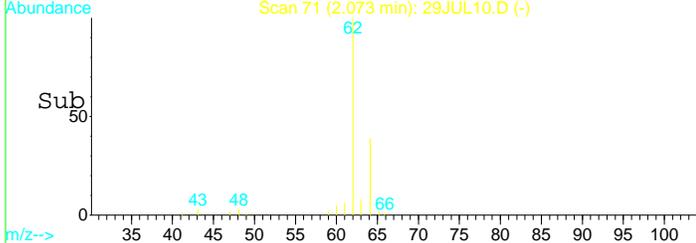
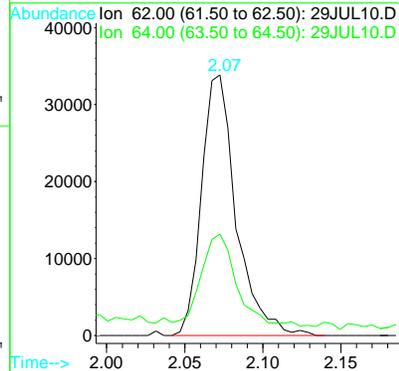
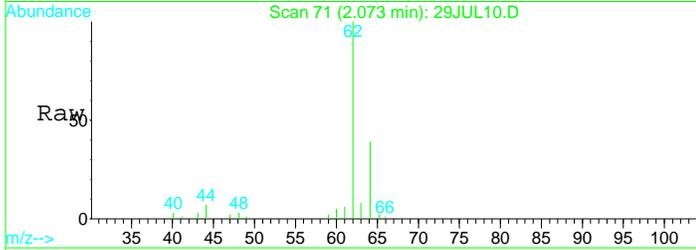
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 949
 Delta R.T. -0.01 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

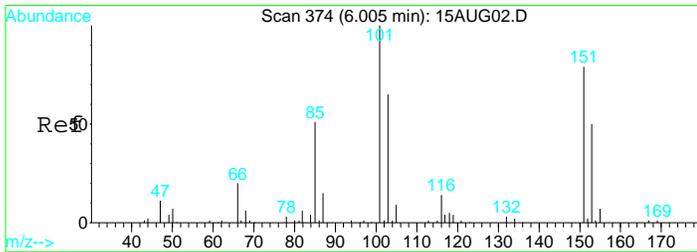
Tgt Ion: 168 Resp: 179580
 Ion Ratio Lower Upper
 168 100
 99 49.2 38.7 71.9



#4
 Vinyl chloride
 Concen: 3.89 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion: 62 Resp: 52358
 Ion Ratio Lower Upper
 62 100
 64 38.8 39.3 72.9#

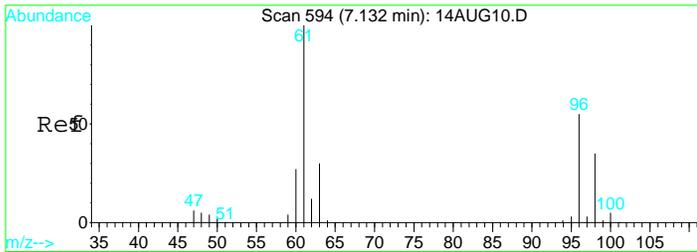
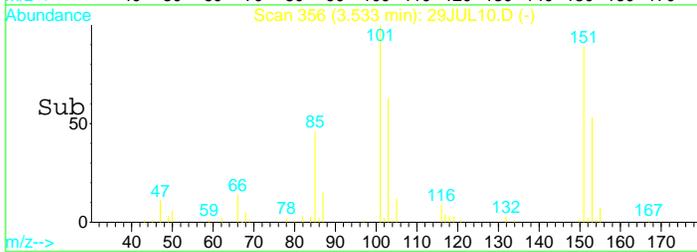
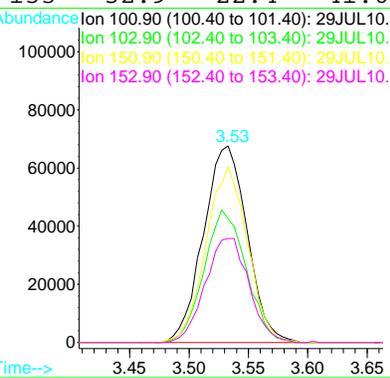
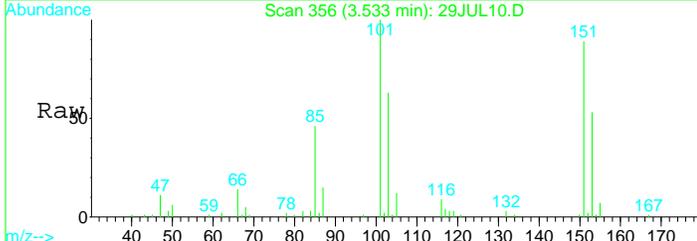




#8
 1,1,2-Trichloro-1,2,2-trifluoroethane
 Concen: 22.76 ug/L
 RT: 3.53 min Scan# 356
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion: 101 Resp: 172838

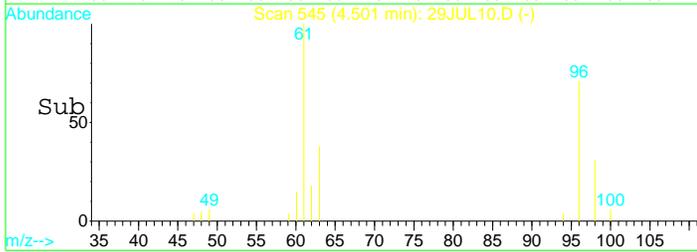
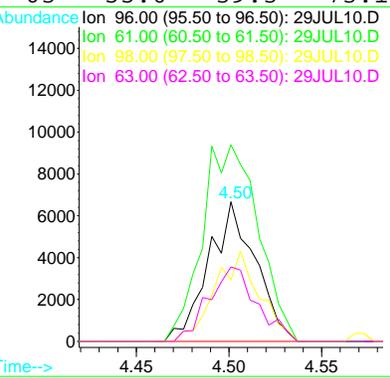
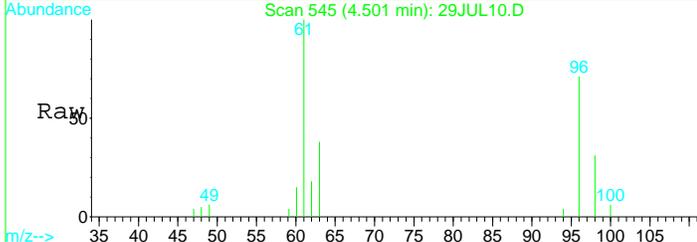
Ion	Ratio	Lower	Upper
101	100		
103	64.9	35.8	66.4
151	84.8	62.6	116.3
153	52.9	22.4	41.6#

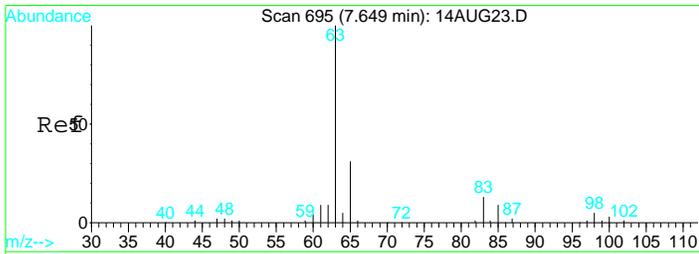


#12
 T-1,2-dichloroethene
 Concen: 1.30 ug/L
 RT: 4.50 min Scan# 545
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion: 96 Resp: 11683

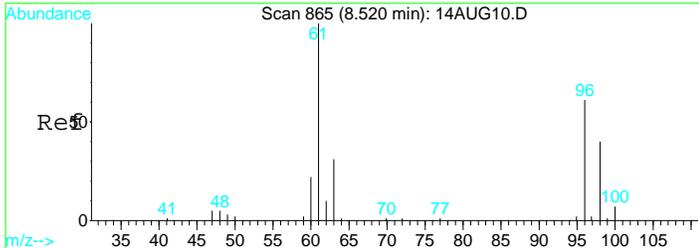
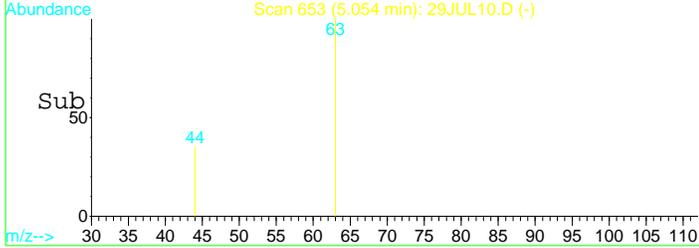
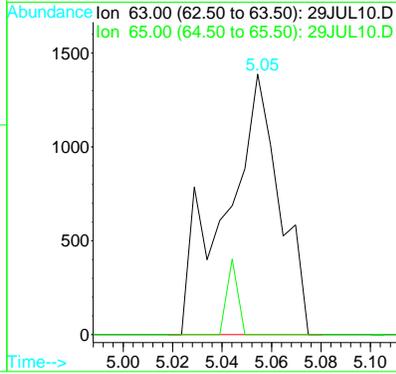
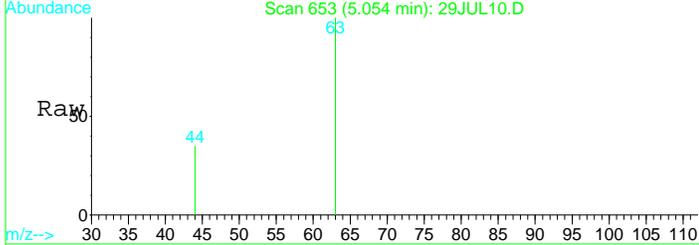
Ion	Ratio	Lower	Upper
96	100		
61	169.2	129.4	240.4
98	61.8	41.5	77.1
63	55.0	39.3	73.1





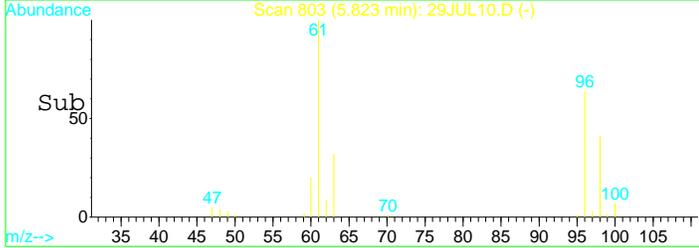
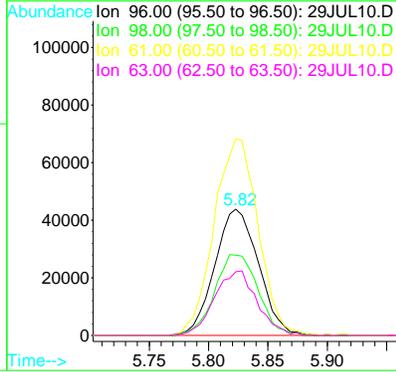
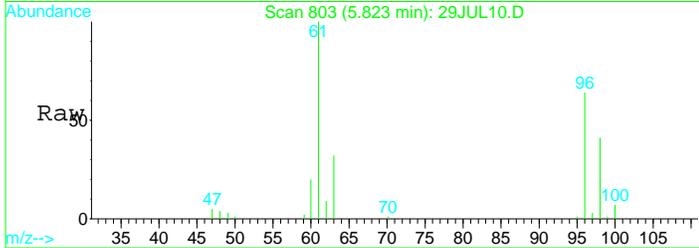
#13
 1,1-Dichloroethane
 Concen: 0.11 ug/L
 RT: 5.05 min Scan# 653
 Delta R.T. 0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

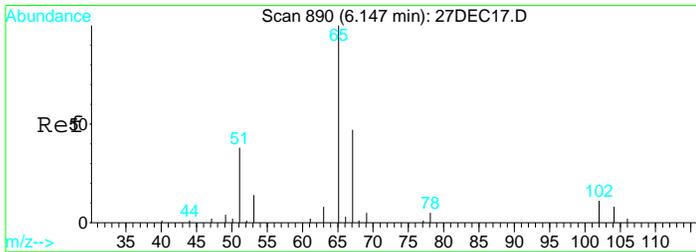
Tgt Ion: 63 Resp: 2114
 Ion Ratio Lower Upper
 63 100
 65 5.9 20.8 38.6#



#15
 Cis-1,2-dichloroethene
 Concen: 11.95 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

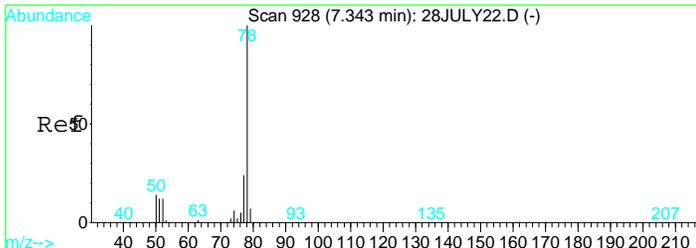
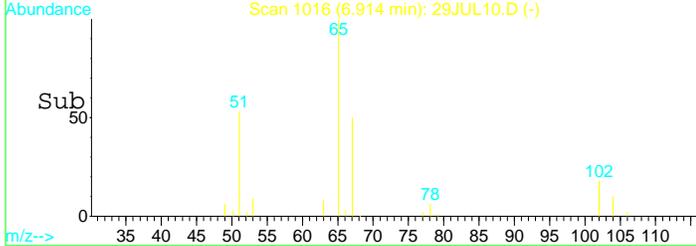
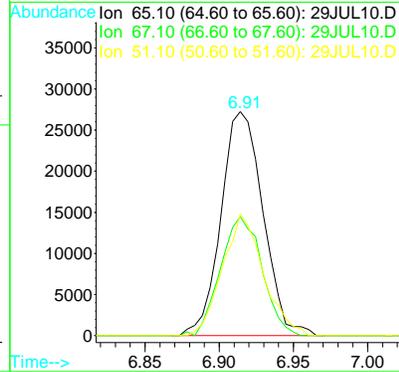
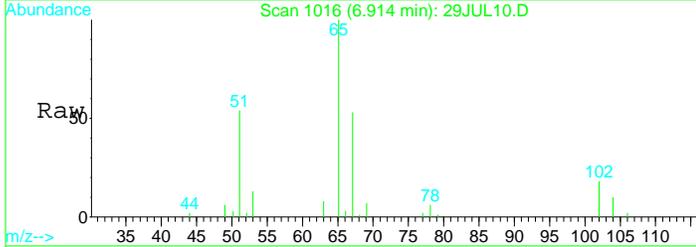
Tgt Ion: 96 Resp: 112087
 Ion Ratio Lower Upper
 96 100
 98 63.6 51.9 96.3
 61 156.7 122.8 228.0
 63 49.9 42.1 78.3





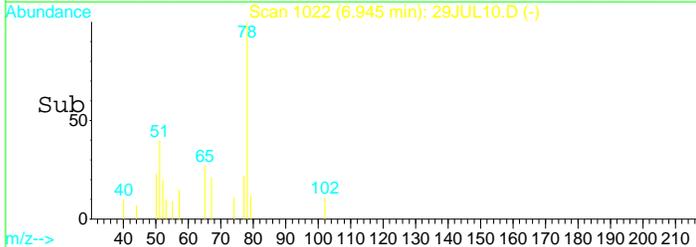
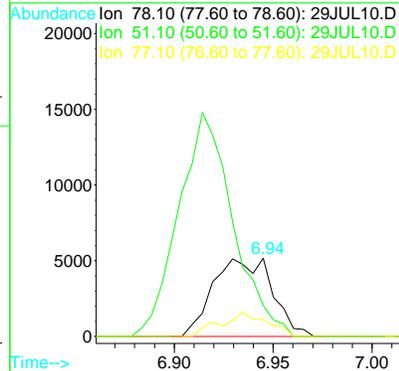
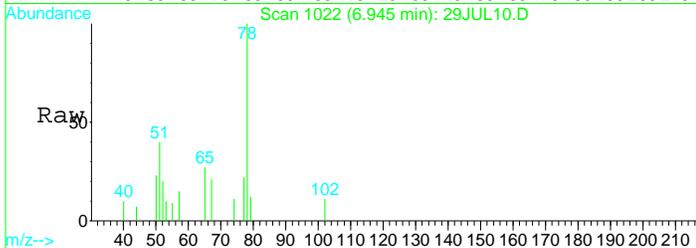
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

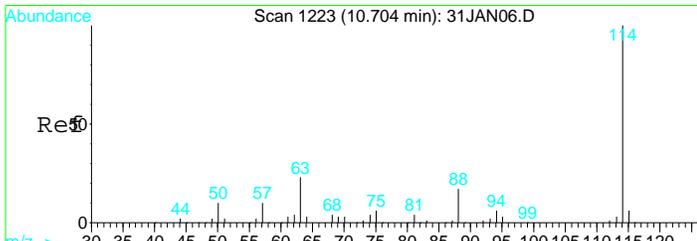
Tgt Ion	Resp	Lower	Upper
65	100		
67	52.5	36.2	67.2
51	52.8	42.0	78.0



#23
 Benzene
 Concen: 0.29 ug/L
 RT: 6.94 min Scan# 1022
 Delta R.T. 0.01 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

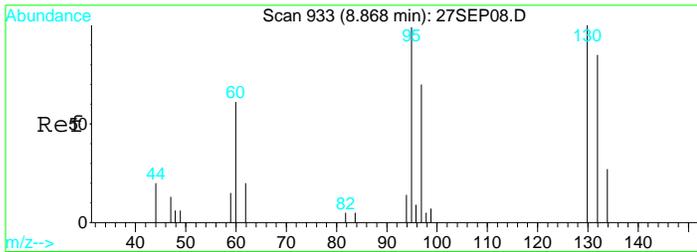
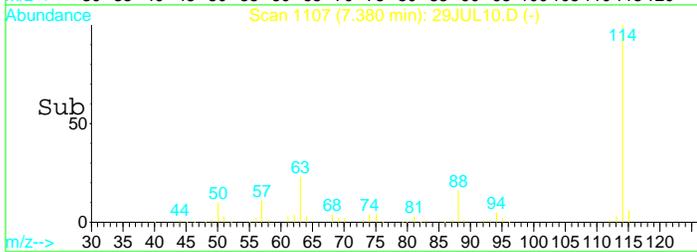
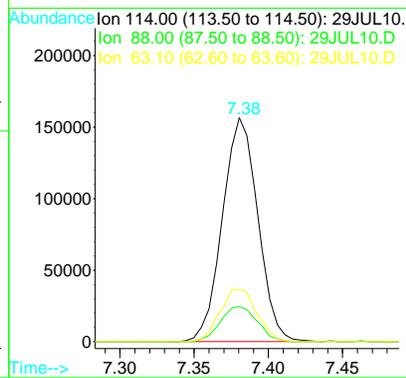
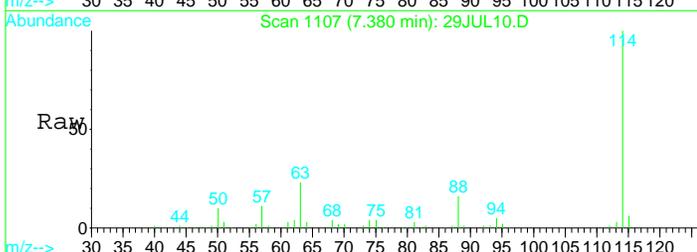
Tgt Ion	Resp	Lower	Upper
78	100		
51	263.4	114.8	213.2#
77	24.4	15.2	28.2





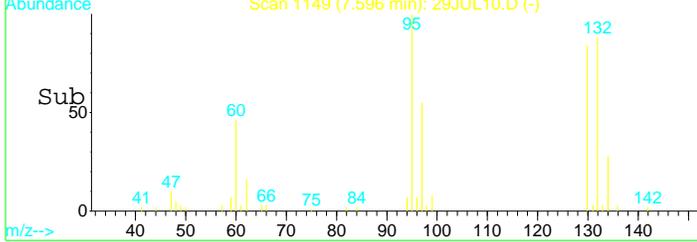
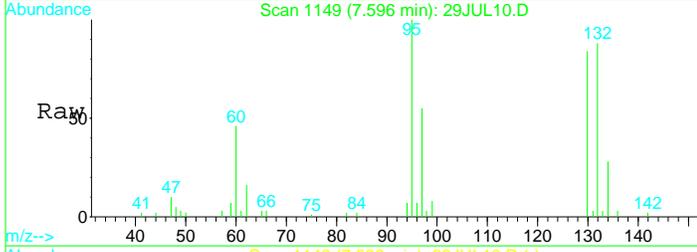
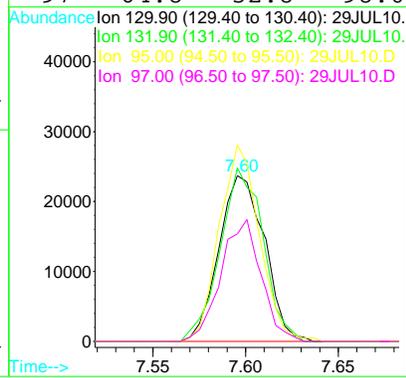
#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

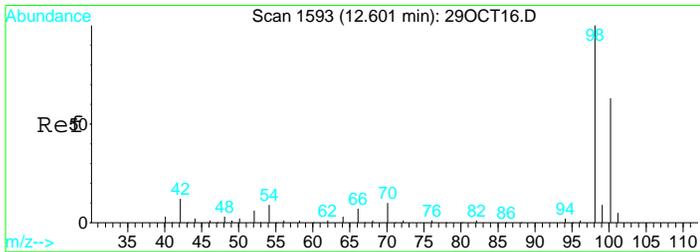
Tgt Ion	Resp	Lower	Upper
114	100		
88	16.4	11.7	21.7
63	24.3	16.7	30.9



#25
 Trichloroethene
 Concen: 4.54 ug/L
 RT: 7.60 min Scan# 1149
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

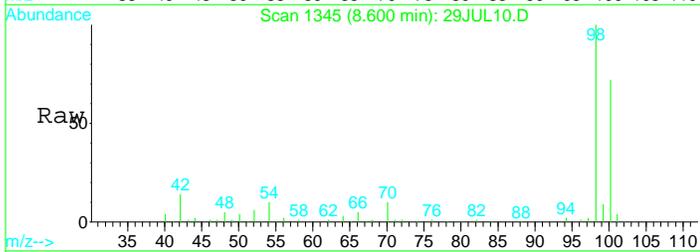
Tgt Ion	Resp	Lower	Upper
130	100		
132	98.8	66.1	122.7
95	104.4	86.1	159.9
97	64.8	52.8	98.0



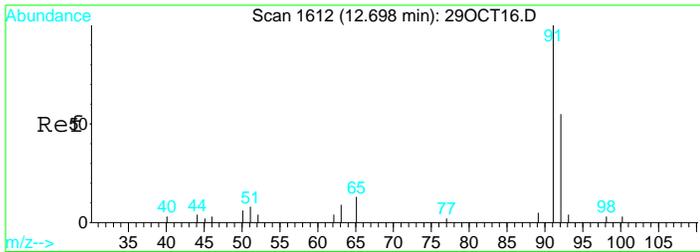
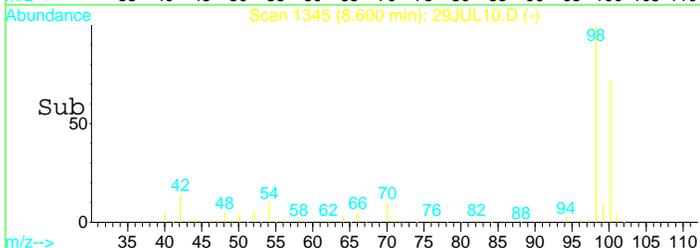
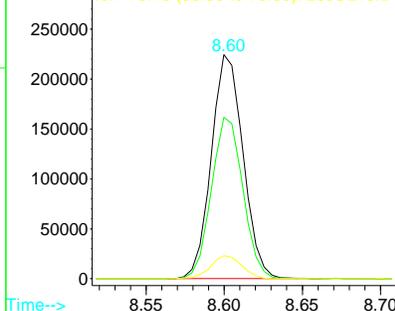


#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1345
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion	Resp	Lower	Upper
98	316413		
98	100		
100	71.1	49.7	92.3
70	10.1	7.3	13.7

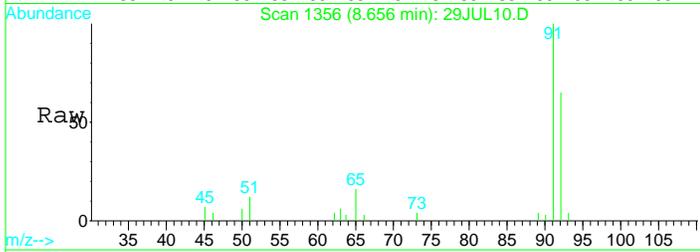


Abundance Ion 98.10 (97.60 to 98.60): 29JUL10.D
 Ion 100.10 (99.60 to 100.60): 29JUL10.D
 Ion 70.10 (69.60 to 70.60): 29JUL10.D

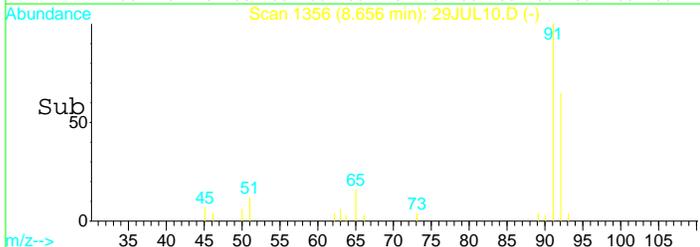
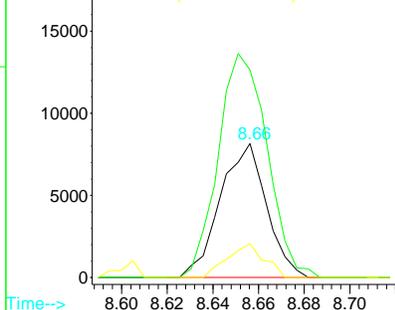


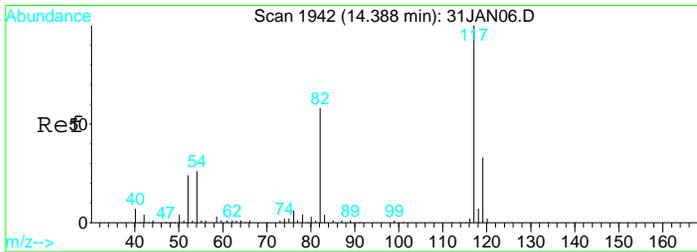
#32
 Toluene
 Concen: 0.51 ug/L
 RT: 8.66 min Scan# 1356
 Delta R.T. 0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion	Resp	Lower	Upper
92	11506		
92	100		
91	176.1	122.6	227.6
65	20.0	16.5	30.7



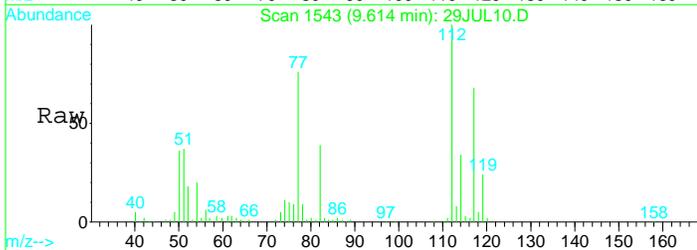
Abundance Ion 92.10 (91.60 to 92.60): 29JUL10.D
 Ion 91.10 (90.60 to 91.60): 29JUL10.D
 Ion 65.10 (64.60 to 65.60): 29JUL10.D



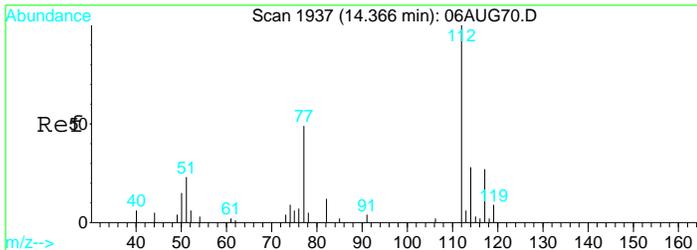
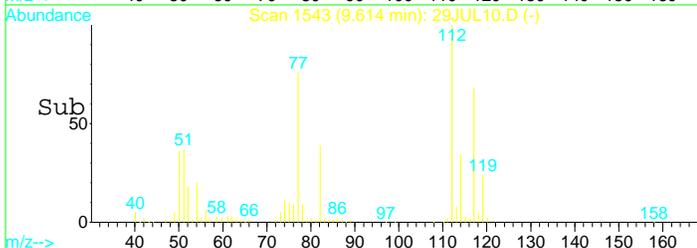
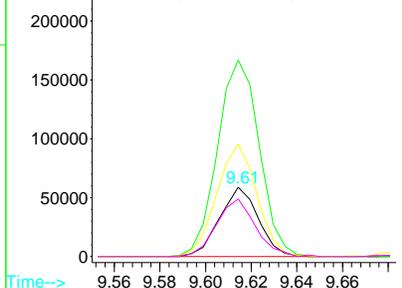


#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion	Resp	Lower	Upper
119	100		
117	304.6	214.5	398.4
82	168.0	117.7	218.7
54	84.3	55.2	102.4

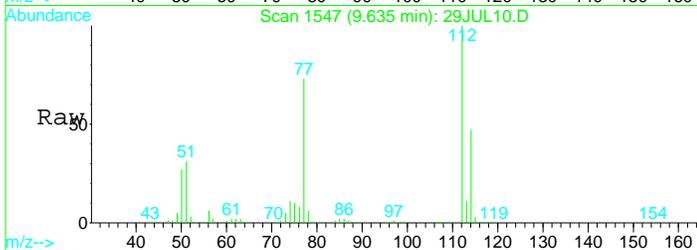


Abundance
 Ion 119.00 (118.50 to 119.50): 29JUL10.D
 Ion 117.00 (116.50 to 117.50): 29JUL10.D
 Ion 82.10 (81.60 to 82.60): 29JUL10.D
 Ion 54.10 (53.60 to 54.60): 29JUL10.D

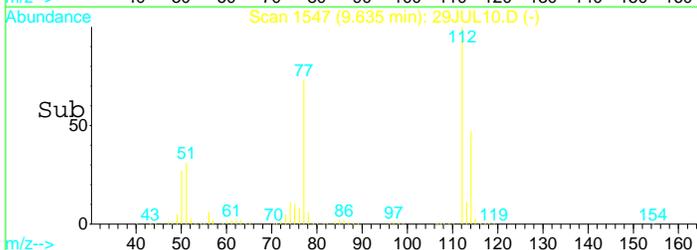
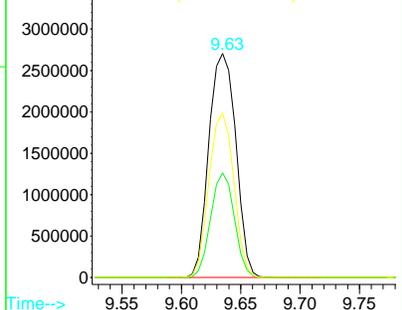


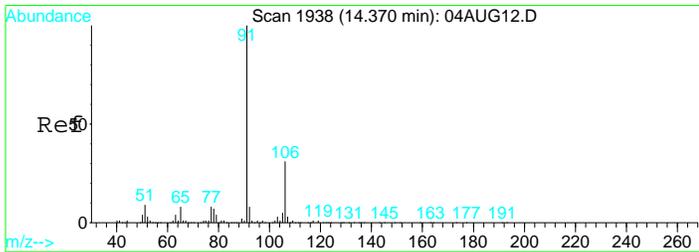
#40
 Chlorobenzene
 Concen: 186.75 ug/L
 RT: 9.63 min Scan# 1547
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion	Resp	Lower	Upper
112	100		
114	41.0	20.6	38.4#
77	67.7	48.4	90.0



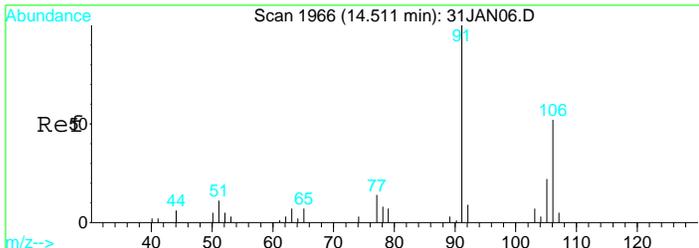
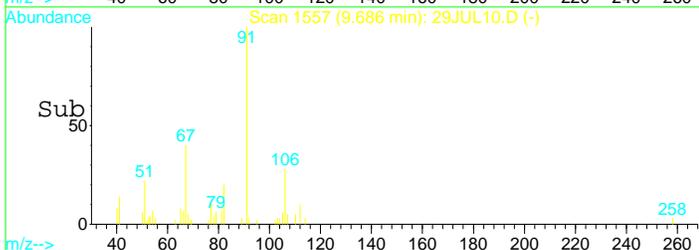
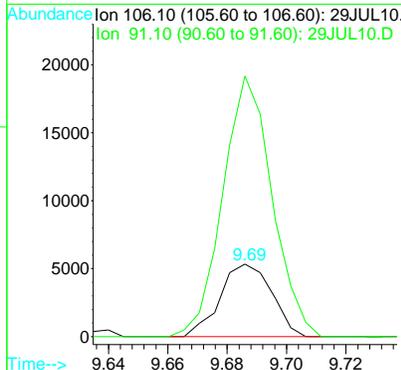
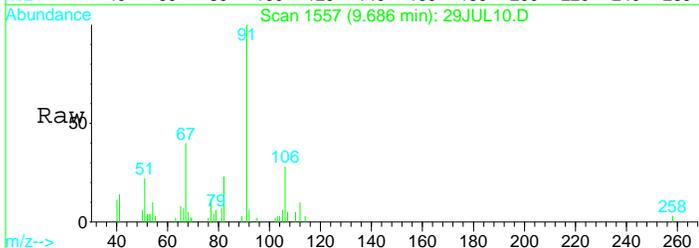
Abundance
 Ion 112.00 (111.50 to 112.50): 29JUL10.D
 Ion 114.00 (113.50 to 114.50): 29JUL10.D
 Ion 77.10 (76.60 to 77.60): 29JUL10.D





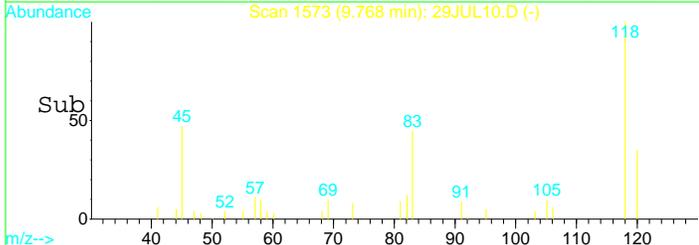
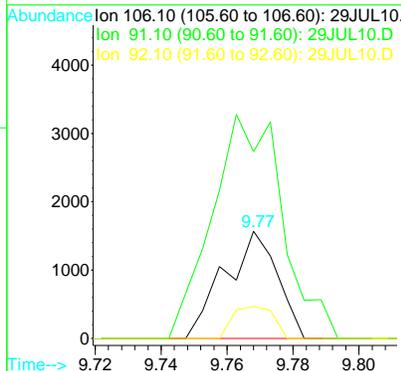
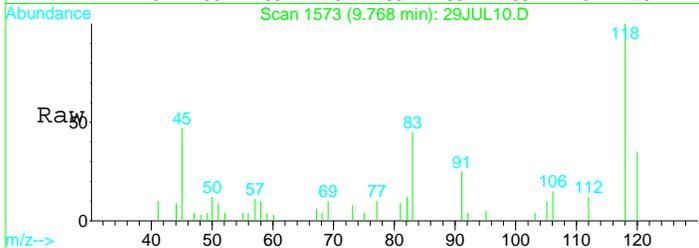
#42
 Ethylbenzene
 Concen: 0.48 ug/L
 RT: 9.69 min Scan# 1557
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

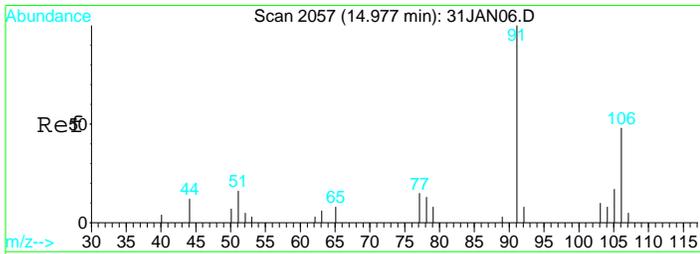
Tgt Ion	Resp	Lower	Upper
106	6435		
91	342.4	241.5	448.5



#43
 P+m-Xylene
 Concen: 0.11 ug/L
 RT: 9.77 min Scan# 1573
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

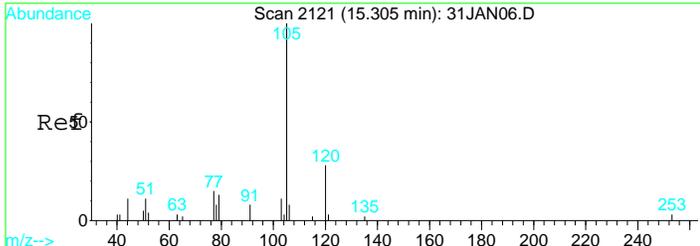
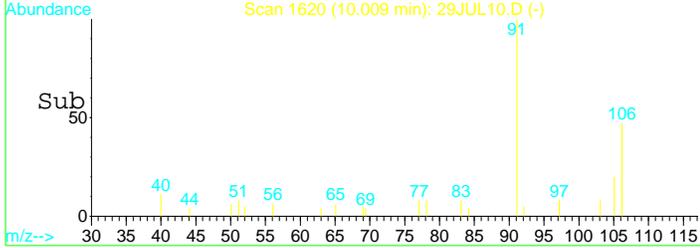
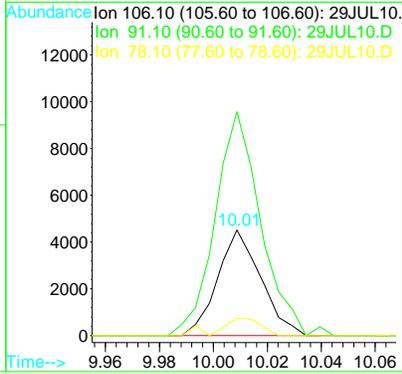
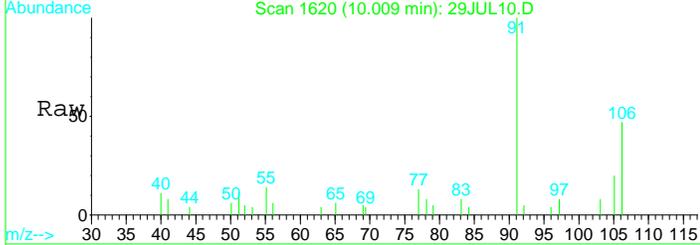
Tgt Ion	Resp	Lower	Upper
106	1740		
91	276.9	135.0	250.6#
92	23.0	10.3	19.1#





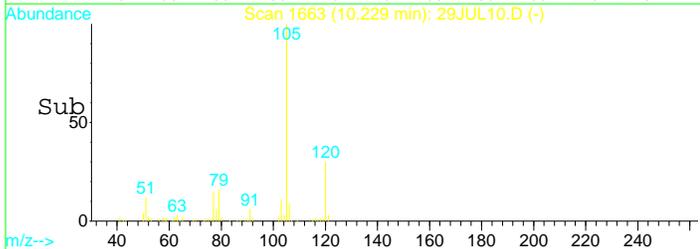
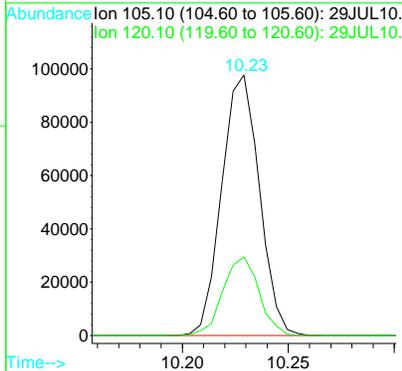
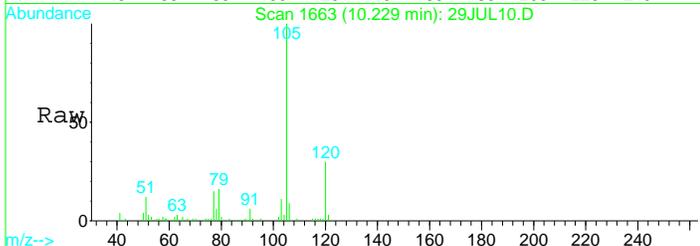
#44
 O-Xylene
 Concen: 0.33 ug/L
 RT: 10.01 min Scan# 1620
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

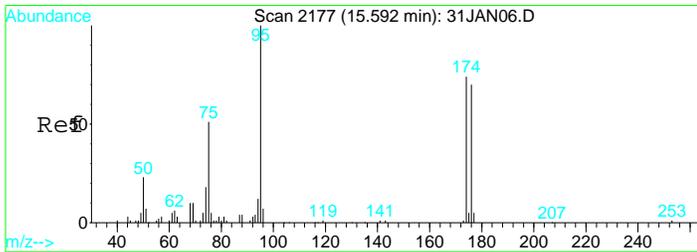
Tgt Ion	Resp	Lower	Upper
106	5025		
106	100		
91	224.0	154.3	286.5
78	16.0	47.1	87.5#



#47
 Isopropylbenzene
 Concen: 3.06 ug/L
 RT: 10.23 min Scan# 1663
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

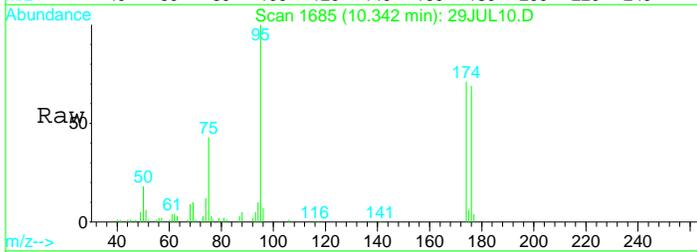
Tgt Ion	Resp	Lower	Upper
105	121103		
105	100		
120	28.8	19.2	35.6



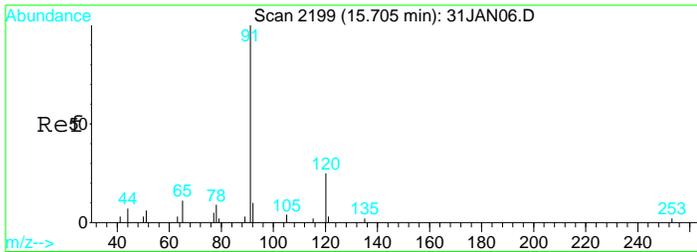
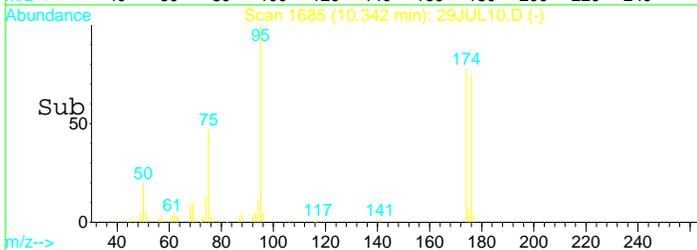
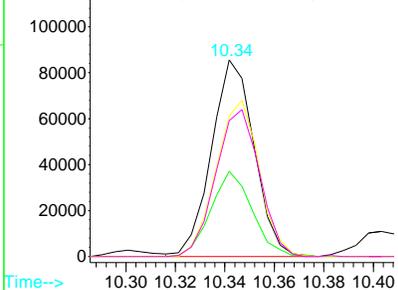


#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1685
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion	Resp	Lower	Upper
95	102492	100	
75	42.2	29.5	54.7
174	80.0	52.3	97.1
176	76.6	49.6	92.2

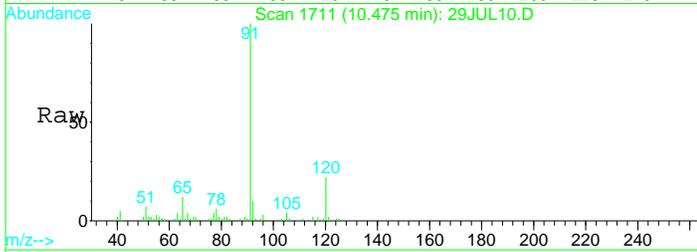


Abundance Ion 95.00 (94.50 to 95.50): 29JUL10.D
 Ion 75.00 (74.50 to 75.50): 29JUL10.D
 Ion 173.90 (173.40 to 174.40): 29JUL10.D
 Ion 175.90 (175.40 to 176.40): 29JUL10.D

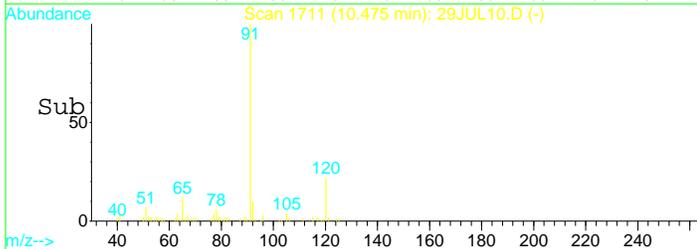
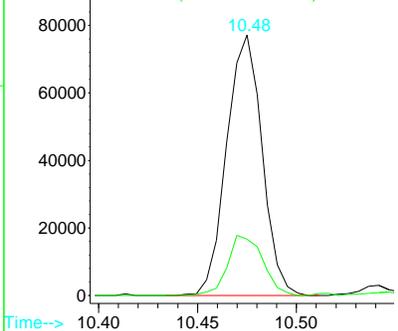


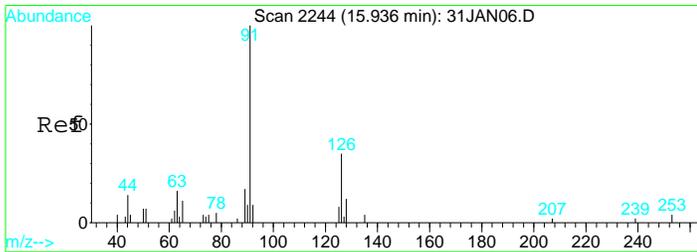
#51
 n-propylbenzene
 Concen: 1.87 ug/L
 RT: 10.48 min Scan# 1711
 Delta R.T. 0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion	Resp	Lower	Upper
91	96015	100	
120	22.8	14.8	27.6



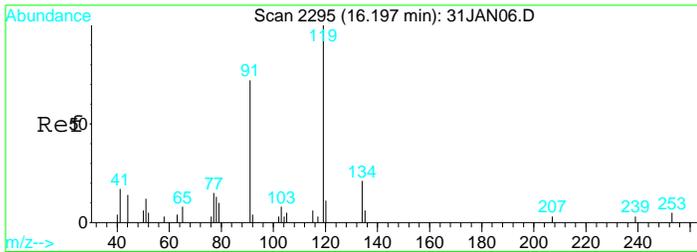
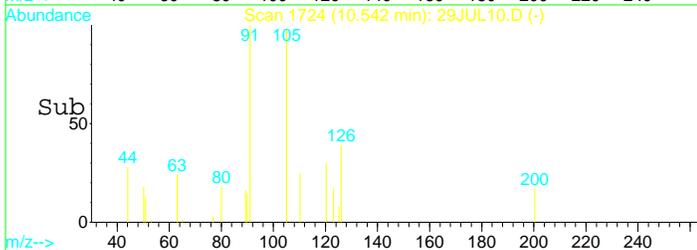
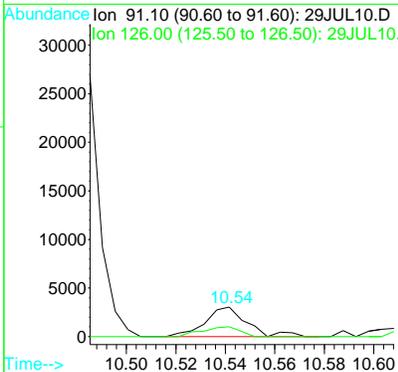
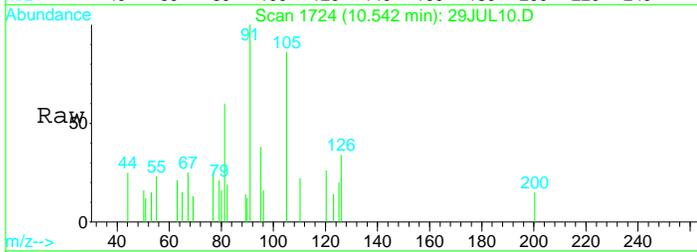
Abundance Ion 91.10 (90.60 to 91.60): 29JUL10.D
 Ion 120.10 (119.60 to 120.60): 29JUL10.D





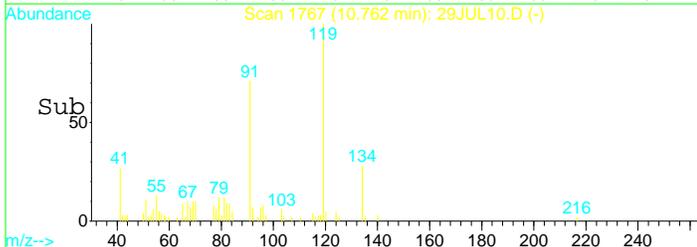
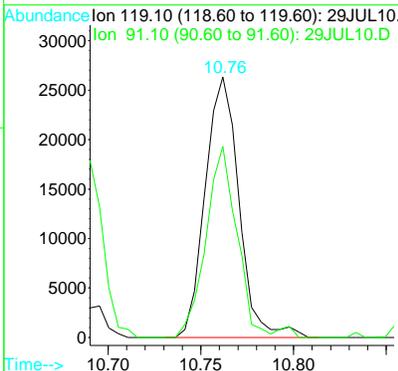
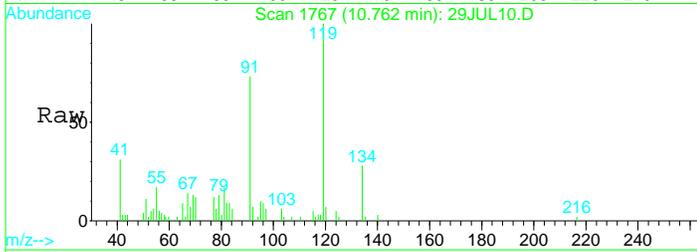
#54
 2-chlorotoluene
 Concen: 0.11 ug/L
 RT: 10.54 min Scan# 1724
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

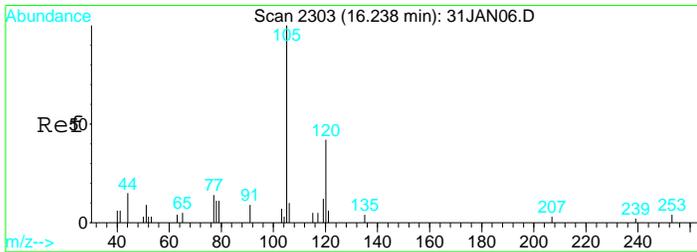
Tgt Ion: 91 Resp: 3586
 Ion Ratio Lower Upper
 91 100
 126 29.8 23.0 42.6



#56
 tert-butylbenzene
 Concen: 1.03 ug/L
 RT: 10.76 min Scan# 1767
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

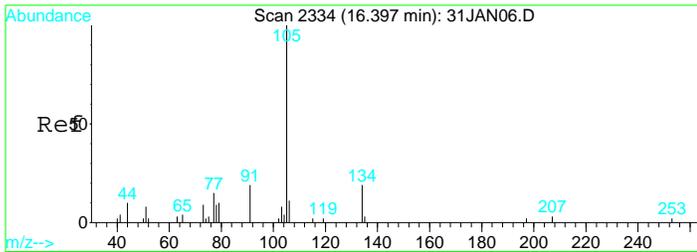
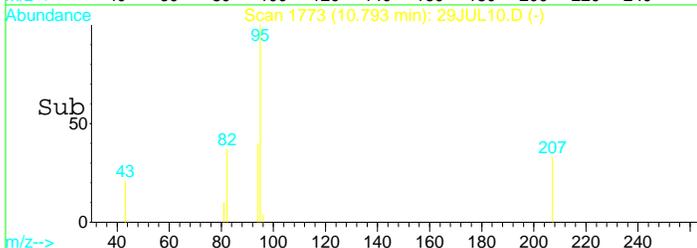
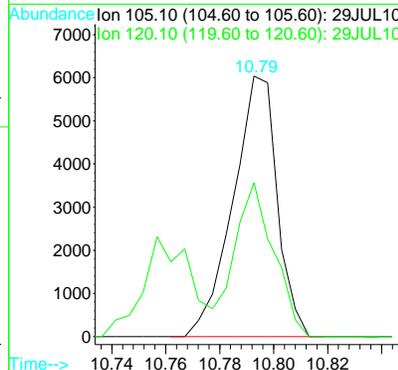
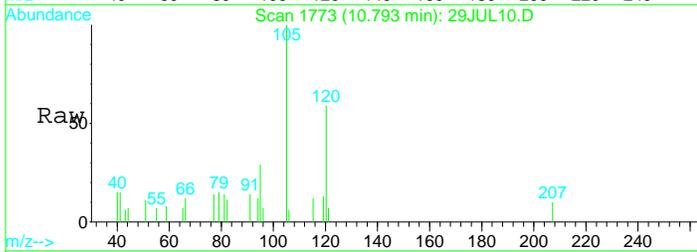
Tgt Ion: 119 Resp: 33433
 Ion Ratio Lower Upper
 119 100
 91 66.6 48.7 90.5





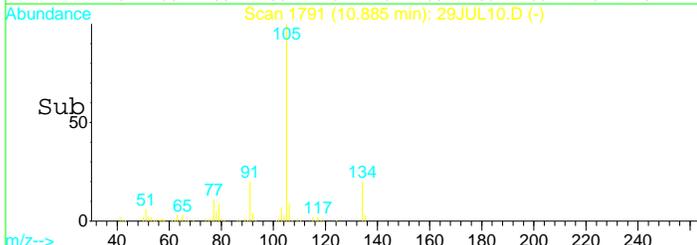
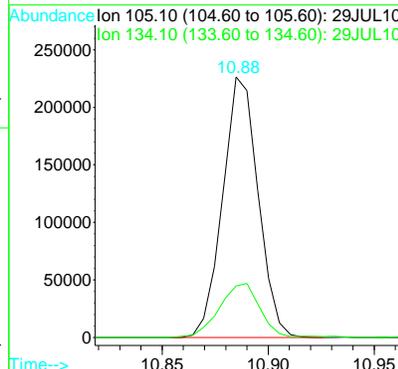
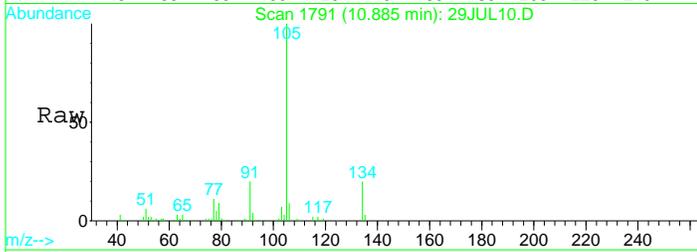
#57
 1,2,4-trimethylbenzene
 Concen: 0.21 ug/L
 RT: 10.79 min Scan# 1773
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

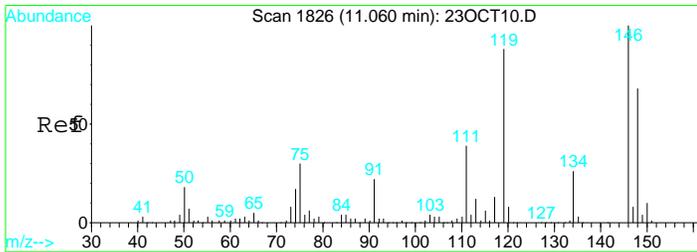
Tgt Ion:105 Resp: 6856
 Ion Ratio Lower Upper
 105 100
 120 51.9 31.8 59.0



#58
 sec-butylbenzene
 Concen: 6.02 ug/L
 RT: 10.88 min Scan# 1791
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

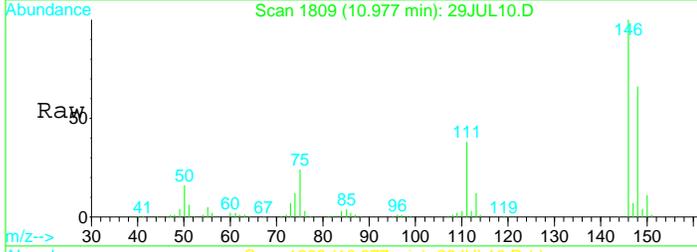
Tgt Ion:105 Resp: 264071
 Ion Ratio Lower Upper
 105 100
 134 24.0 14.4 26.7



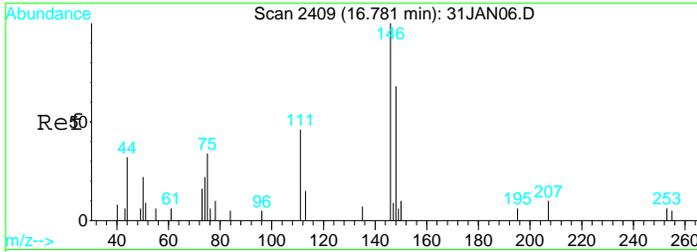
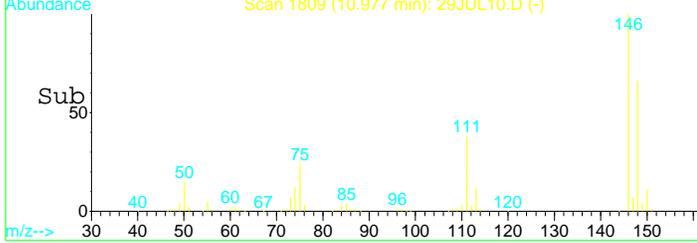
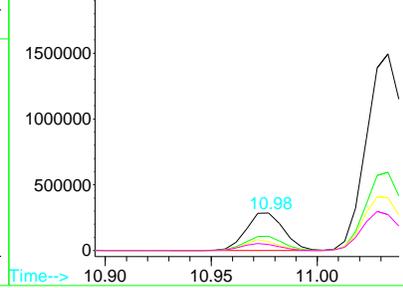


#60
 1,3-Dichlorobenzene
 Concen: 20.41 ug/L
 RT: 10.98 min Scan# 1809
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion	Resp	Lower	Upper
146	100		
111	37.7	28.8	53.6
75	25.4	24.0	44.6
50	18.4	14.6	27.0



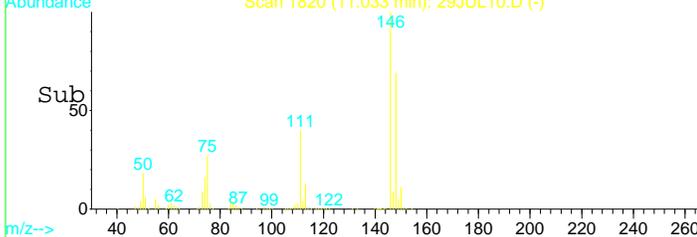
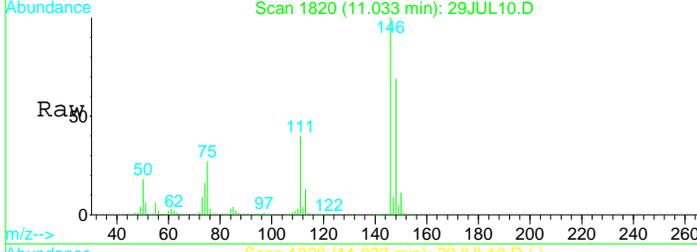
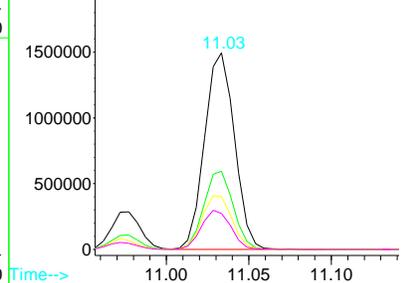
Abundance
 Ion 146.00 (145.50 to 146.50): 29JUL10.D
 Ion 111.00 (110.50 to 111.50): 29JUL10.D
 Ion 75.00 (74.50 to 75.50): 29JUL10.D
 Ion 50.10 (49.60 to 50.60): 29JUL10.D

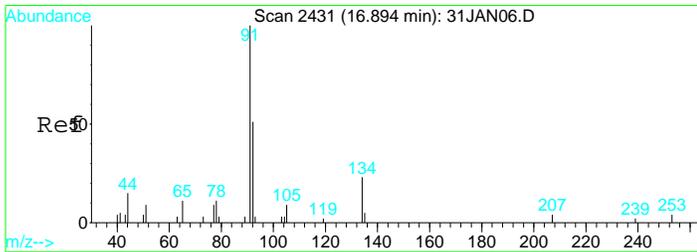


#61
 1,4-Dichlorobenzene
 Concen: 110.82 ug/L
 RT: 11.03 min Scan# 1820
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion	Resp	Lower	Upper
146	100		
111	39.0	28.1	52.3
75	27.4	20.3	37.7
50	19.7	16.0	29.6

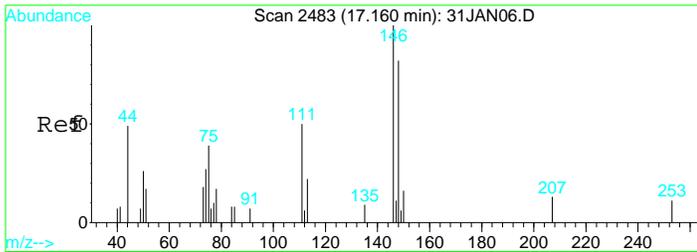
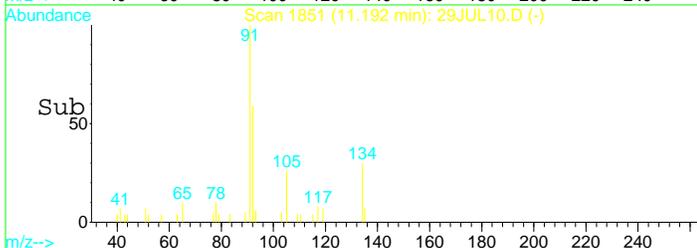
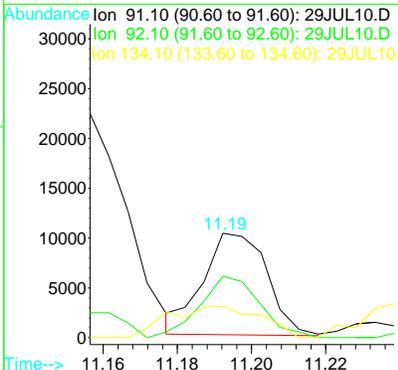
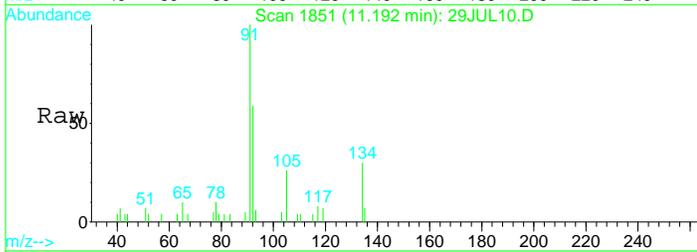
Abundance
 Ion 146.00 (145.50 to 146.50): 29JUL10.D
 Ion 111.00 (110.50 to 111.50): 29JUL10.D
 Ion 75.00 (74.50 to 75.50): 29JUL10.D
 Ion 50.10 (49.60 to 50.60): 29JUL10.D





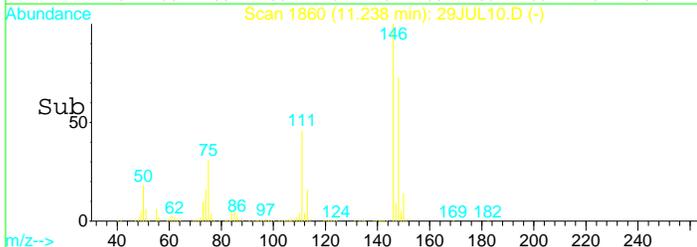
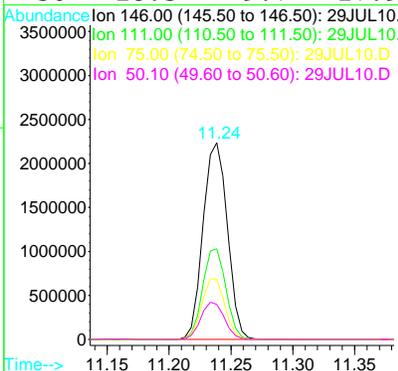
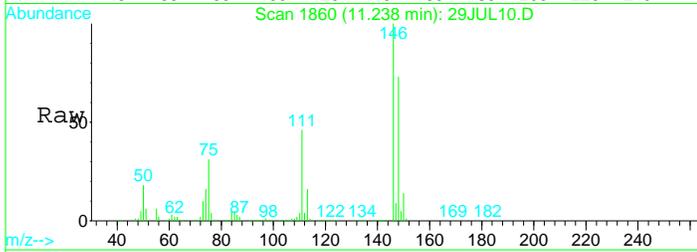
#62
 n-butylbenzene
 Concen: 0.37 ug/L
 RT: 11.19 min Scan# 1851
 Delta R.T. -0.01 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

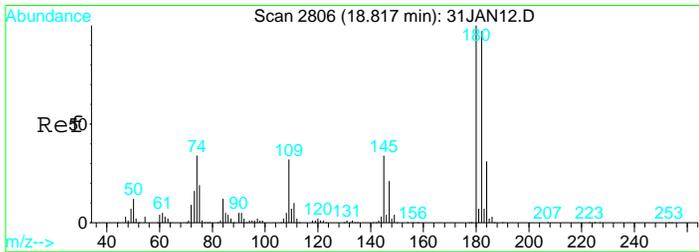
Tgt Ion	Resp	Lower	Upper
91	12191		
92	56.8	38.4	71.2
134	44.9	18.4	34.2#



#63
 1,2-Dichlorobenzene
 Concen: 204.96 ug/L
 RT: 11.24 min Scan# 1860
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

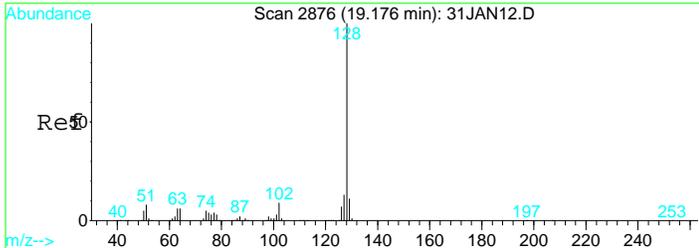
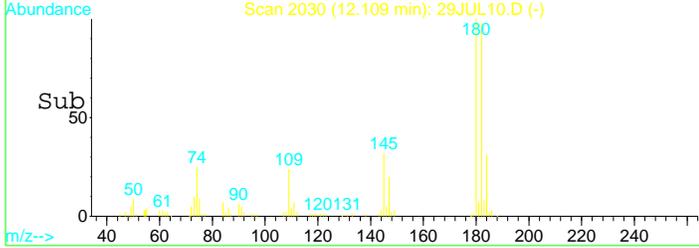
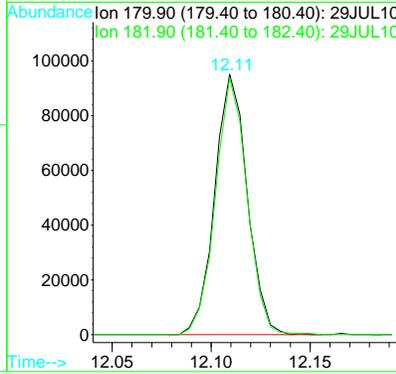
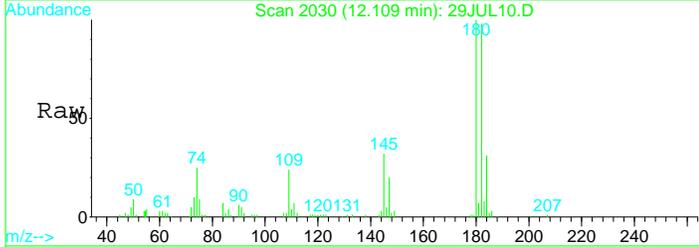
Tgt Ion	Resp	Lower	Upper
146	3068878		
111	44.2	28.8	53.6
75	29.4	19.8	36.8
50	18.3	9.7	17.9#





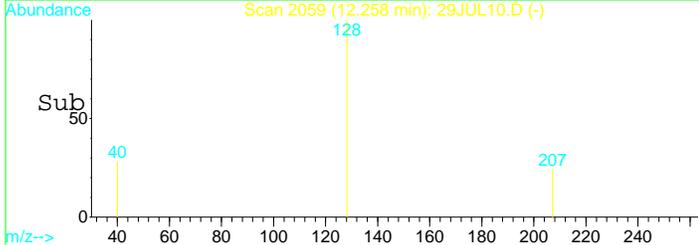
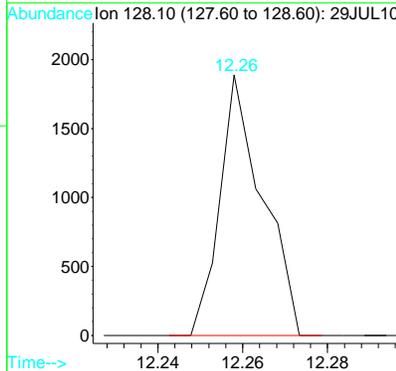
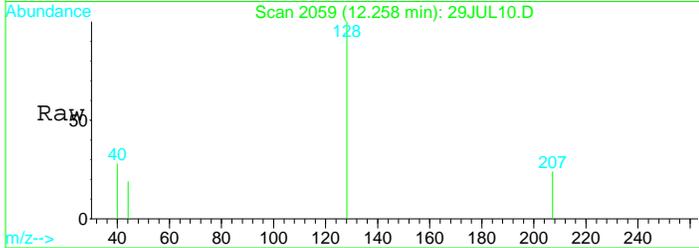
#66
 1,2,4-trichlorobenzene
 Concen: 12.52 ug/L
 RT: 12.11 min Scan# 2030
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

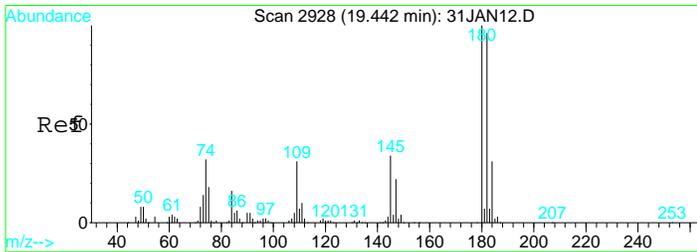
Tgt Ion:180 Resp: 108605
 Ion Ratio Lower Upper
 180 100
 182 95.8 65.4 121.4



#68
 naphthalene
 Concen: 0.12 ug/L
 RT: 12.26 min Scan# 2059
 Delta R.T. -0.01 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

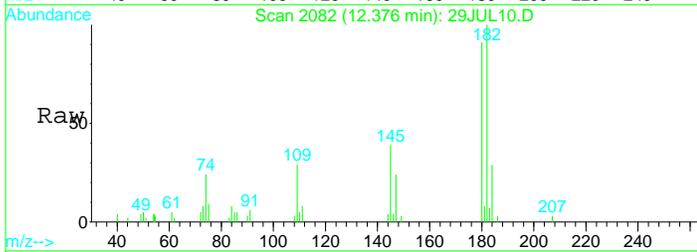
Tgt Ion:128 Resp: 1318



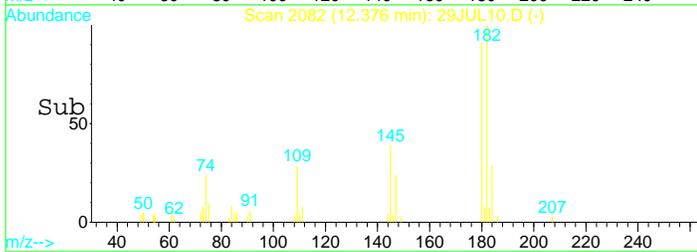
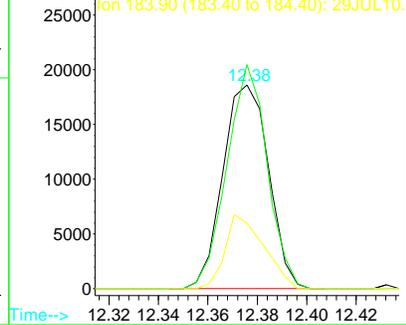


#69
 1,2,3-trichlorobenzene
 Concen: 3.28 ug/L
 RT: 12.38 min Scan# 2082
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion	Resp	Lower	Upper
180	100		
182	97.1	61.7	114.5
184	30.8	15.3	28.3#



Abundance
 Ion 180.00 (179.50 to 180.50): 29JUL10.
 Ion 181.90 (181.40 to 182.40): 29JUL10.
 Ion 183.90 (183.40 to 184.40): 29JUL10.



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL10.D Vial: 10
 Acq On : 29 Jul 2017 5:59 pm Operator: MGC
 Sample : 1720405-15 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:24 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	179580	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	259780	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	69430	10.00	ug/L	0.00
Target Compounds						Qvalue
4) 1,2-dichlorotrifluoroethan	3.29	67	847972	71.67	ug/L #	75
27) Cyclohexane	6.61	56	52403	2.23	ug/L #	73

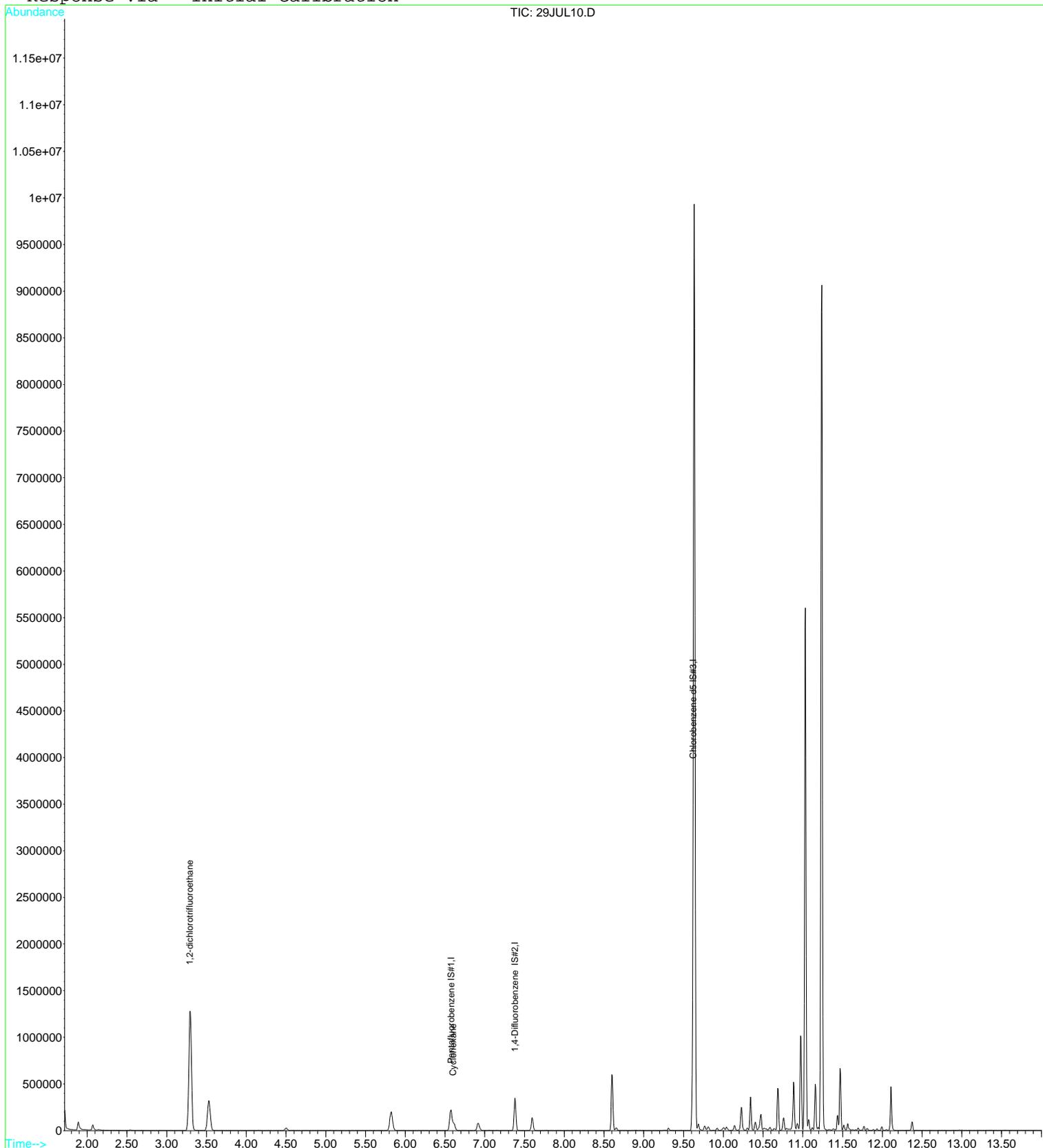
Quantitation Report

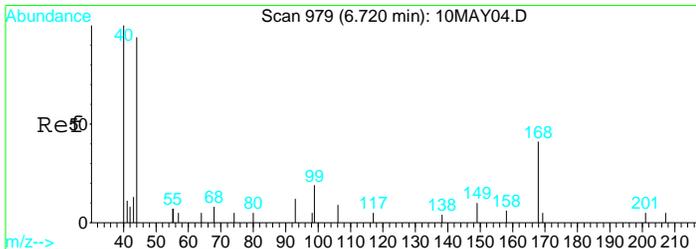
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL10.D
Acq On : 29 Jul 2017 5:59 pm
Sample : 1720405-15
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:24 2017

Vial: 10
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

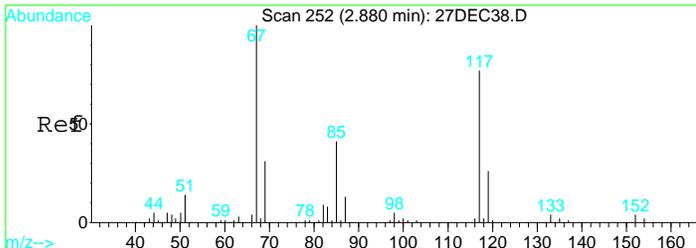
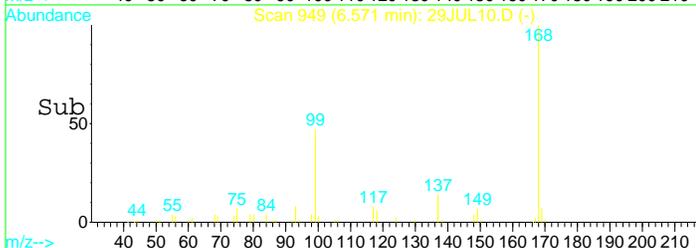
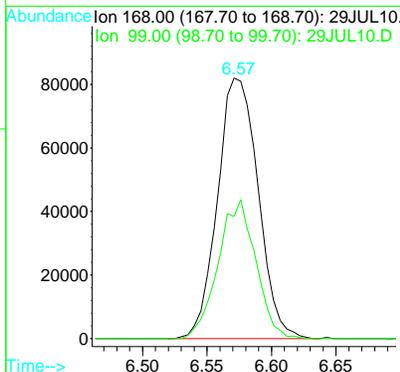
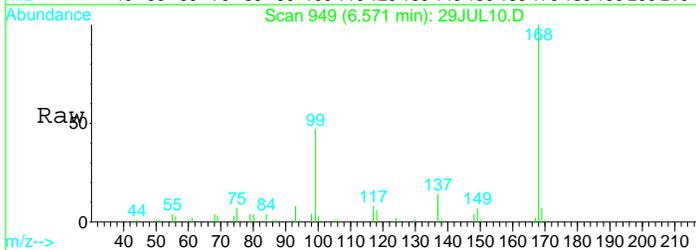
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





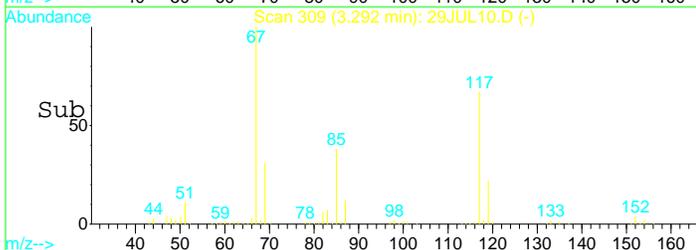
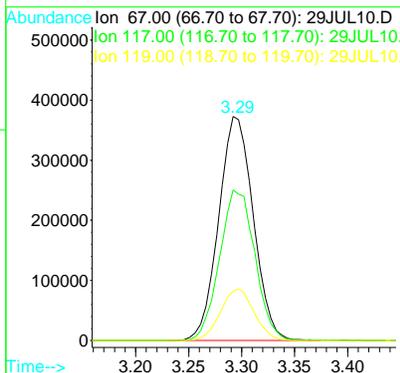
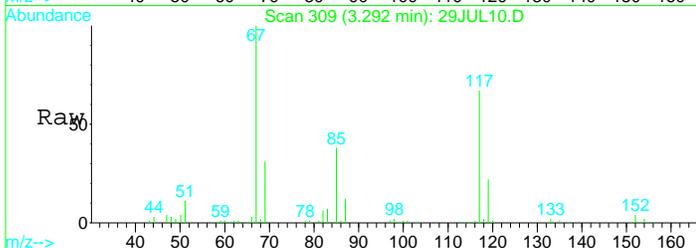
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 949
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

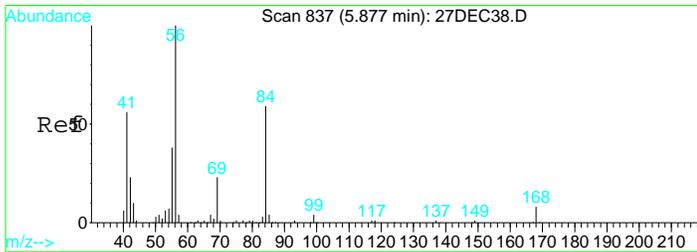
Tgt Ion	Resp	Lower	Upper
168	179580		
99	49.2	36.1	67.1



#4
 1,2-dichlorotrifluoroethane
 Concen: 71.67 ug/L
 RT: 3.29 min Scan# 309
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

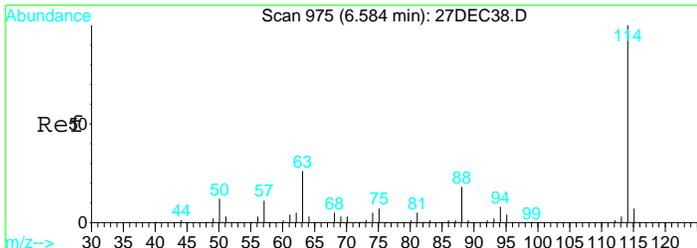
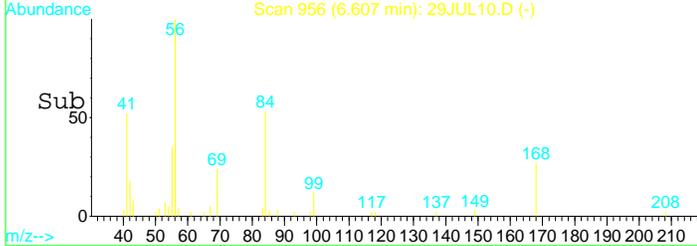
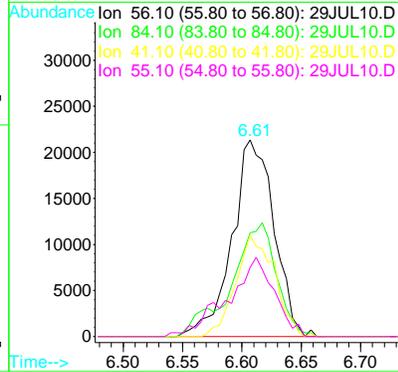
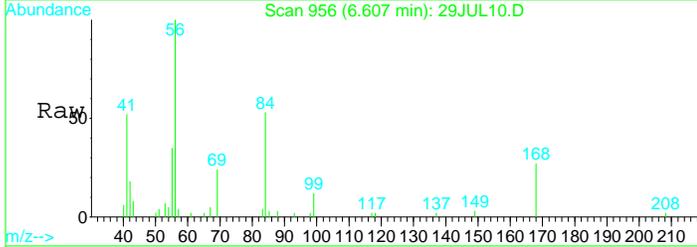
Tgt Ion	Resp	Lower	Upper
67	847972		
117	68.5	36.7	68.1#
119	22.5	5.9	10.9#





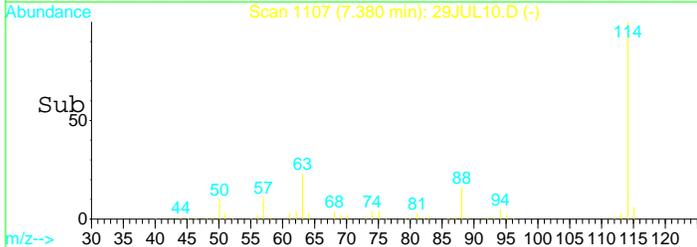
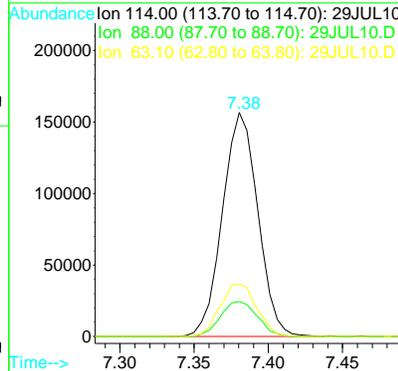
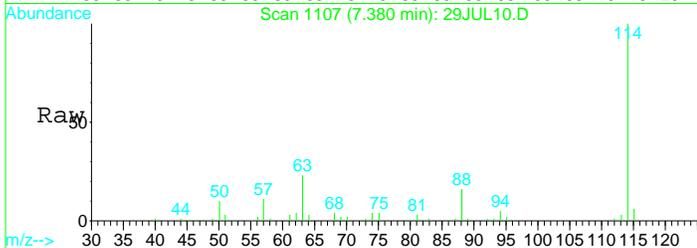
#27
 Cyclohexane
 Concen: 2.23 ug/L
 RT: 6.61 min Scan# 956
 Delta R.T. -0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

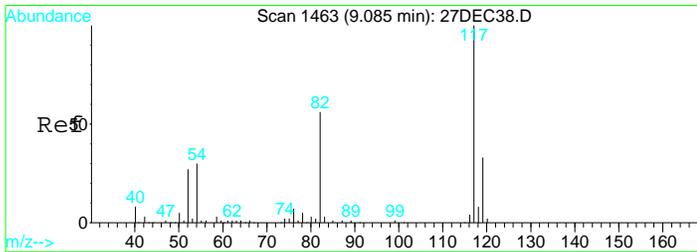
Tgt Ion	Resp	Lower	Upper
56	100		
84	62.3	29.5	54.7#
41	47.7	26.4	49.0
55	35.8	13.9	25.9#



#29
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. 0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

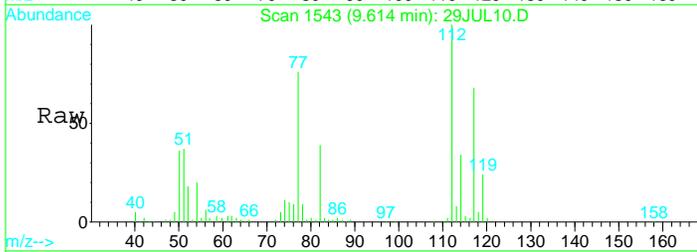
Tgt Ion	Resp	Lower	Upper
114	100		
88	16.4	11.1	20.7
63	24.3	16.4	30.4



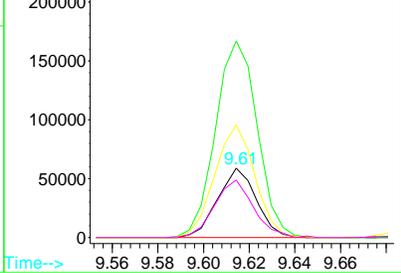
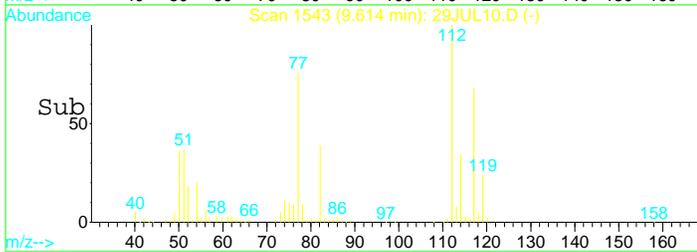


#36
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. 0.00 min
 Lab File: 29JUL10.D
 Acq: 29 Jul 2017 5:59 pm

Tgt Ion	Resp	Lower	Upper
119	100		
117	304.6	217.1	403.3
82	168.0	122.7	227.9
54	84.3	55.2	102.6



Abundance
 Ion 119.00 (118.70 to 119.70): 29JUL10.D
 Ion 117.00 (116.70 to 117.70): 29JUL10.D
 Ion 82.10 (81.80 to 82.80): 29JUL10.D
 Ion 54.10 (53.80 to 54.80): 29JUL10.D



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL27.D Vial: 27
 Acq On : 30 Jul 2017 5:43 pm Operator: MGC
 Sample : 1720405-15RE1 Inst : MS-V5
 Misc : 10 ;5ML/50ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 31 6:38 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	161482	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	244352	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	65937	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	49102	10.41	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	104.10%
31) Toluene d8 SMC#2	8.60	98	302209	10.02	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.20%
49) Bromofluorobenzene SMC#3	10.34	95	96109	9.76	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.60%

Target Compounds

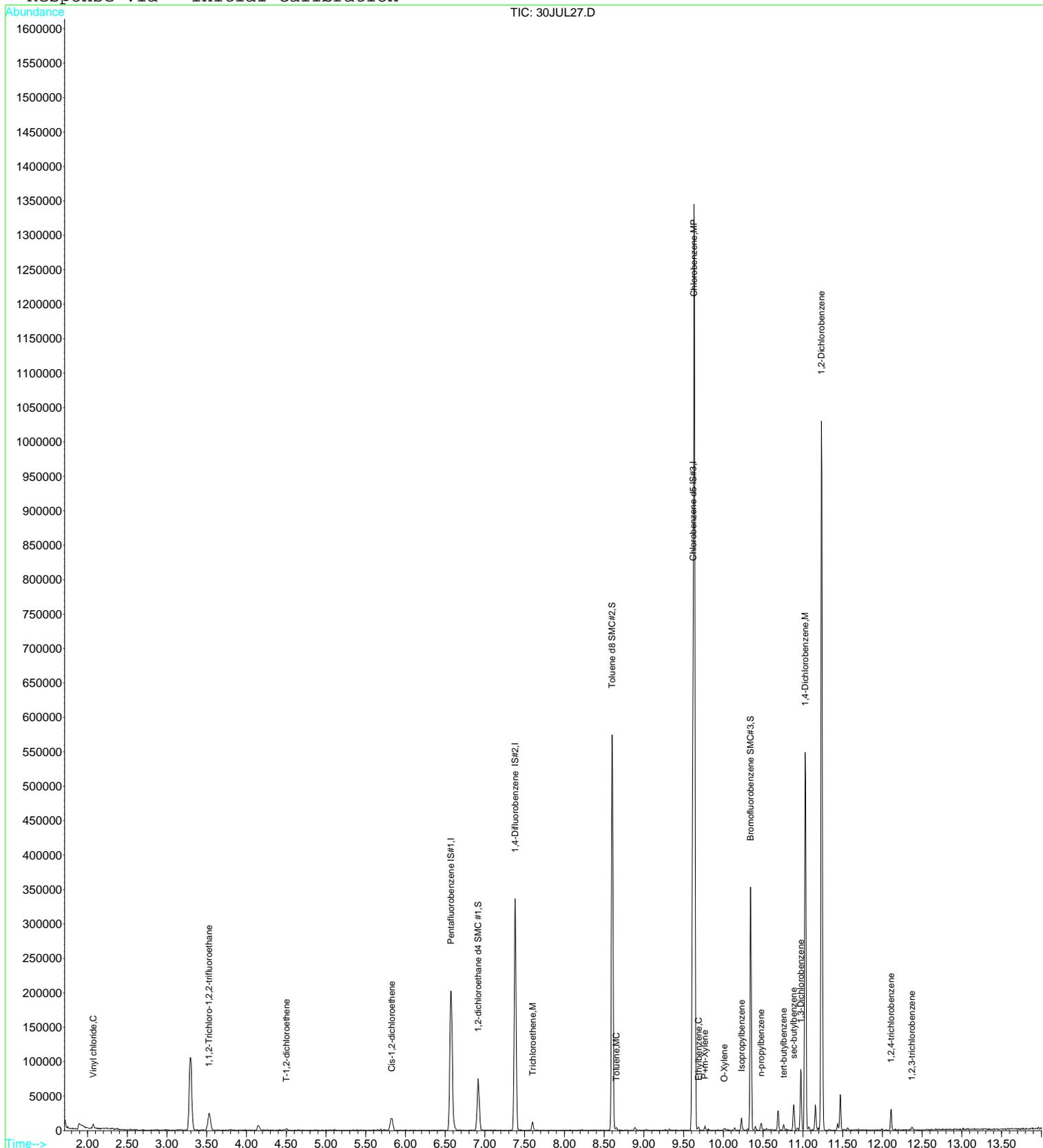
	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	4259	0.35	ug/L	79
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	13369	1.96	ug/L #	82
12) T-1,2-dichloroethene	4.50	96	686	0.08	ug/L #	19
15) Cis-1,2-dichloroethene	5.82	96	9618	1.14	ug/L	91
25) Trichloroethene	7.60	130	3841	0.46	ug/L #	74
32) Toluene	8.66	92	1728	0.08	ug/L #	93
40) Chlorobenzene	9.64	112	556870	25.47	ug/L	89
42) Ethylbenzene	9.69	106	955	0.07	ug/L	59
43) P+m-Xylene	9.77	106	905	0.06	ug/L #	60
44) O-Xylene	10.01	106	808	0.06	ug/L #	68
47) Isopropylbenzene	10.23	105	9915	0.26	ug/L	98
51) n-propylbenzene	10.48	91	7751	0.16	ug/L	97
56) tert-butylbenzene	10.76	119	3261	0.11	ug/L	91
58) sec-butylbenzene	10.89	105	20135	0.48	ug/L	97
60) 1,3-Dichlorobenzene	10.97	146	29557	1.79	ug/L	91
61) 1,4-Dichlorobenzene	11.03	146	184125	11.43	ug/L	94
63) 1,2-Dichlorobenzene	11.23	146	341326	24.00	ug/L #	96
66) 1,2,4-trichlorobenzene	12.10	180	7846	0.95	ug/L	99
69) 1,2,3-trichlorobenzene	12.37	180	1672	0.24	ug/L #	74

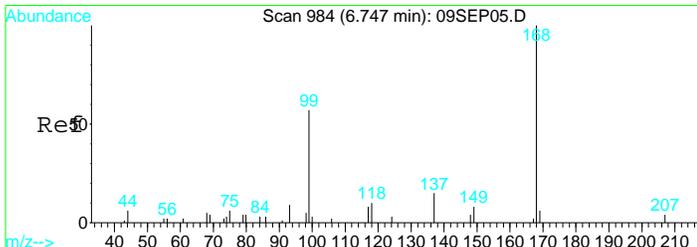
Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL27.D
Acq On : 30 Jul 2017 5:43 pm
Sample : 1720405-15RE1
Misc : 10 ;5ML/50ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 31 6:38 2017

Vial: 27
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

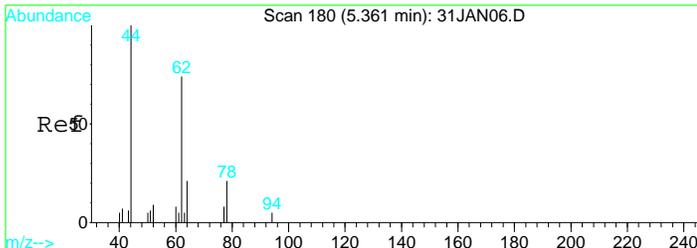
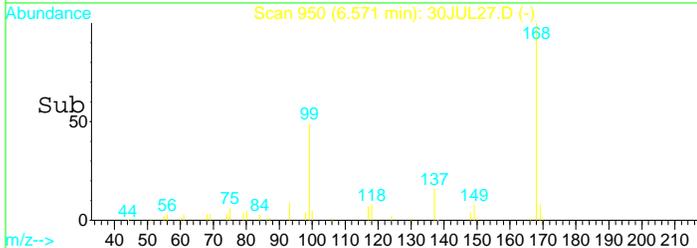
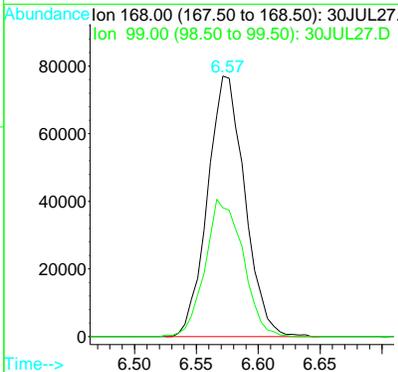
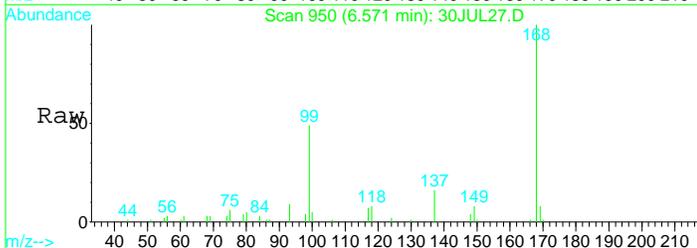
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





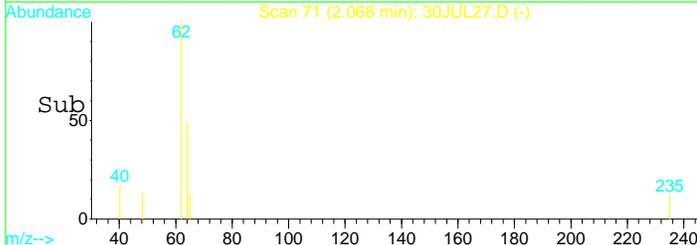
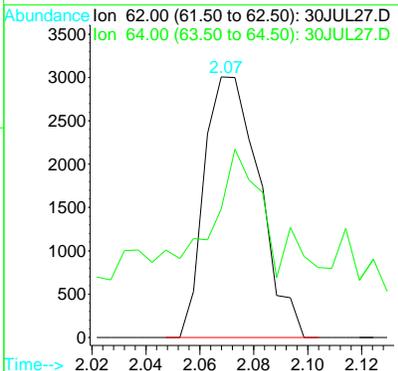
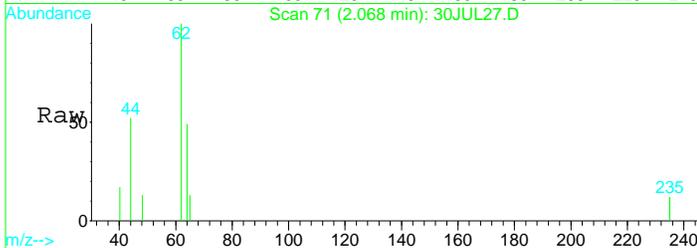
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

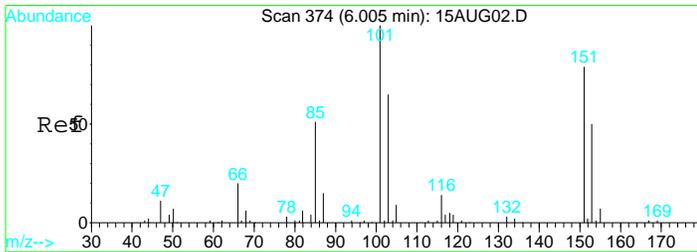
Tgt Ion: 168 Resp: 161482
 Ion Ratio Lower Upper
 168 100
 99 53.3 38.7 71.9



#4
 Vinyl chloride
 Concen: 0.35 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion: 62 Resp: 4259
 Ion Ratio Lower Upper
 62 100
 64 40.9 39.3 72.9

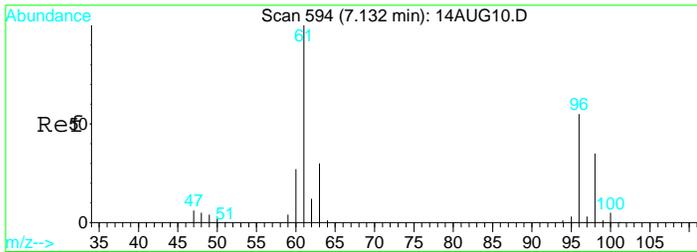
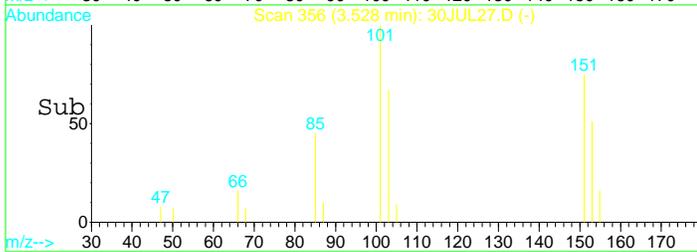
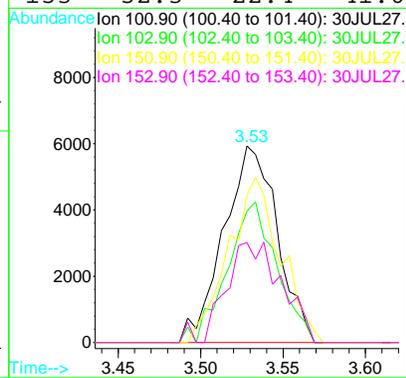
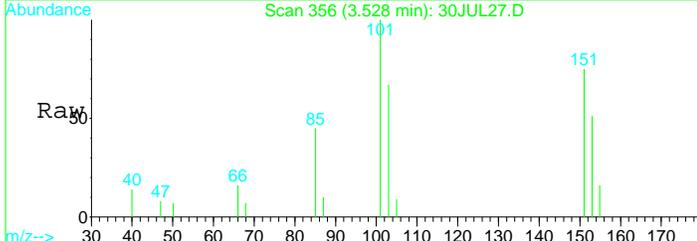




#8
 1,1,2-Trichloro-1,2,2-trifluoroethane
 Concen: 1.96 ug/L
 RT: 3.53 min Scan# 356
 Delta R.T. -0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion: 101 Resp: 13369

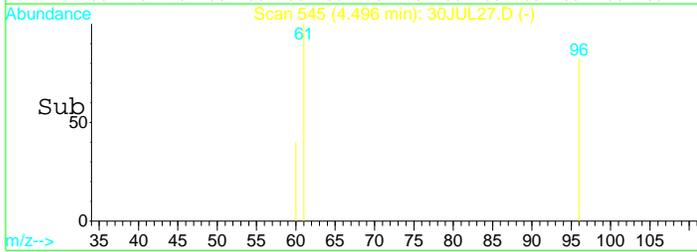
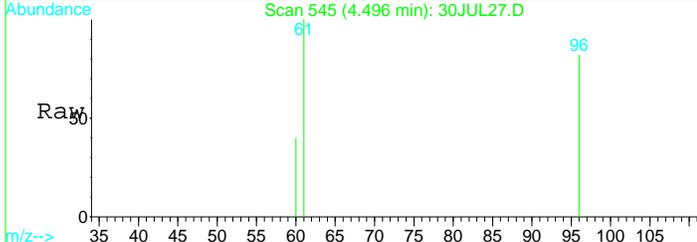
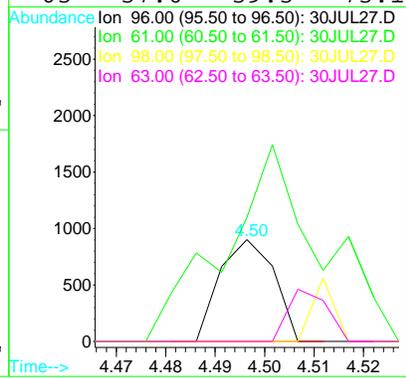
Ion	Ratio	Lower	Upper
101	100		
103	66.0	35.8	66.4
151	81.3	62.6	116.3
153	52.3	22.4	41.6#

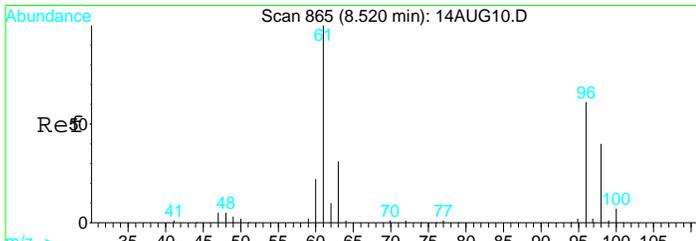


#12
 T-1,2-dichloroethene
 Concen: 0.08 ug/L
 RT: 4.50 min Scan# 545
 Delta R.T. -0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

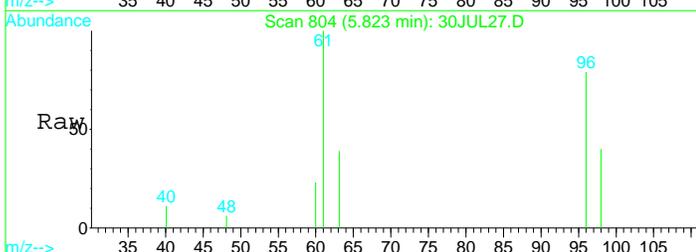
Tgt Ion: 96 Resp: 686

Ion	Ratio	Lower	Upper
96	100		
61	342.7	129.4	240.4#
98	25.1	41.5	77.1#
63	37.0	39.3	73.1#



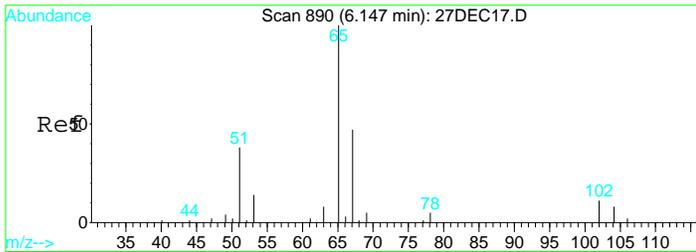
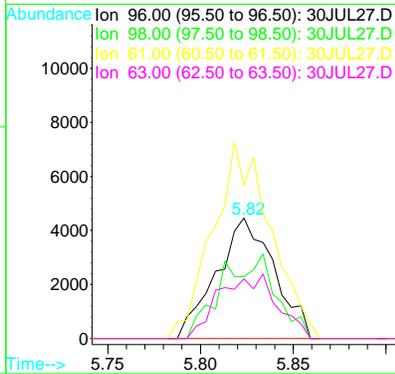
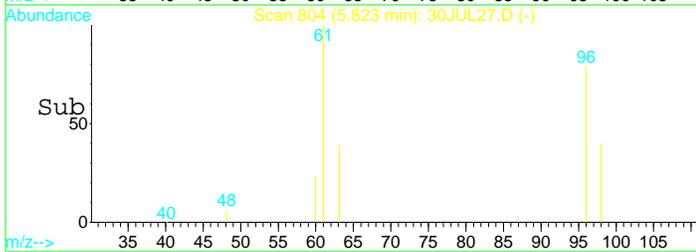


#15
 Cis-1,2-dichloroethene
 Concen: 1.14 ug/L
 RT: 5.82 min Scan# 804
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

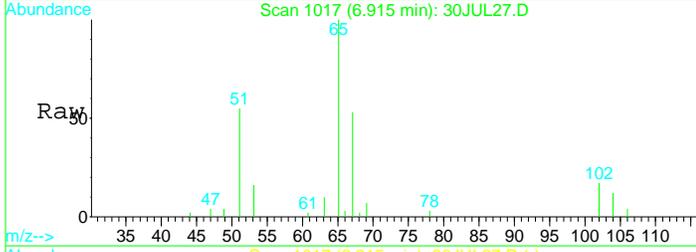


Tgt Ion: 96 Resp: 9618

Ion	Ratio	Lower	Upper
96	100		
98	66.3	51.9	96.3
61	162.4	122.8	228.0
63	53.6	42.1	78.3

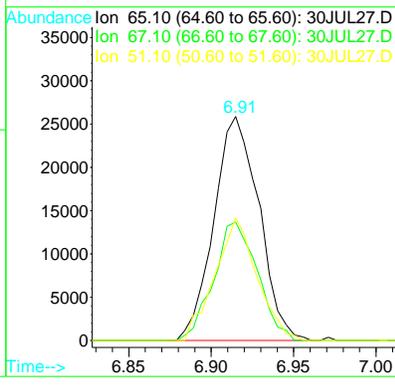
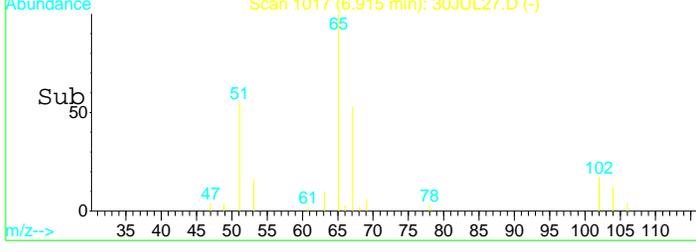


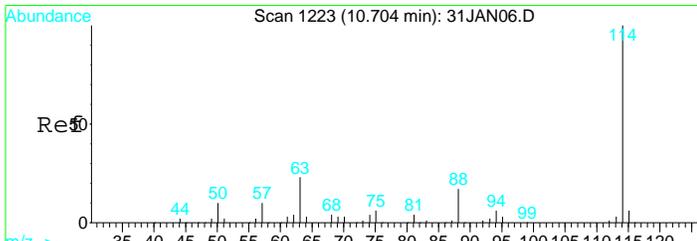
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1017
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm



Tgt Ion: 65 Resp: 49102

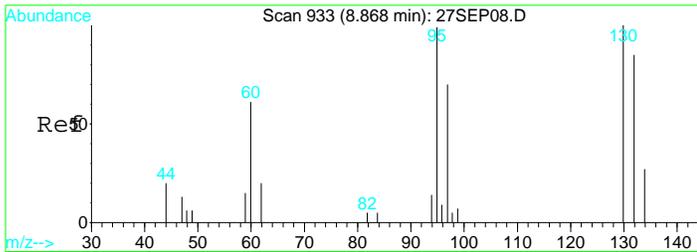
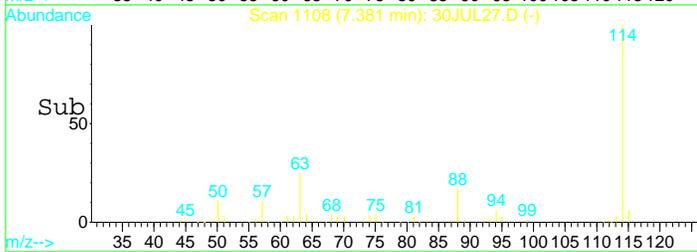
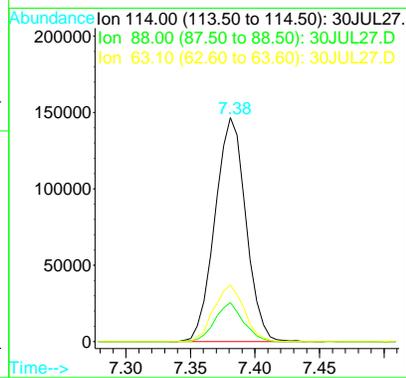
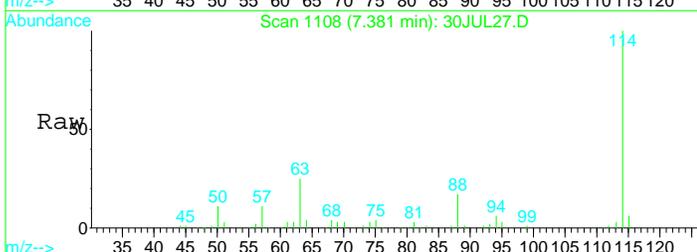
Ion	Ratio	Lower	Upper
65	100		
67	51.4	36.2	67.2
51	51.0	42.0	78.0





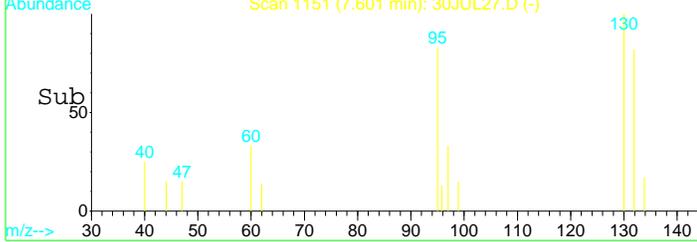
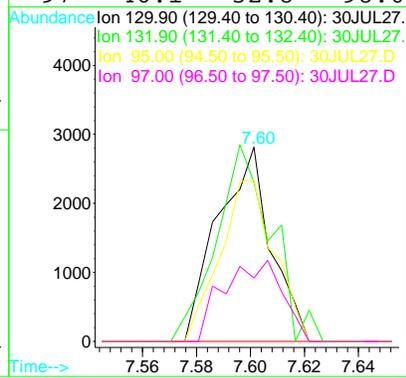
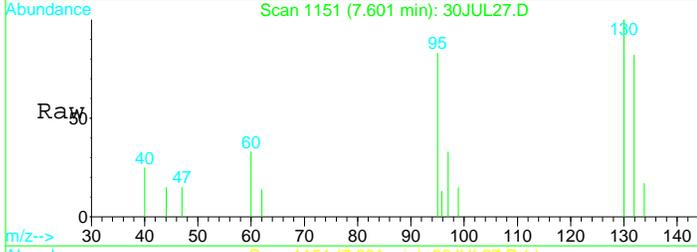
#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

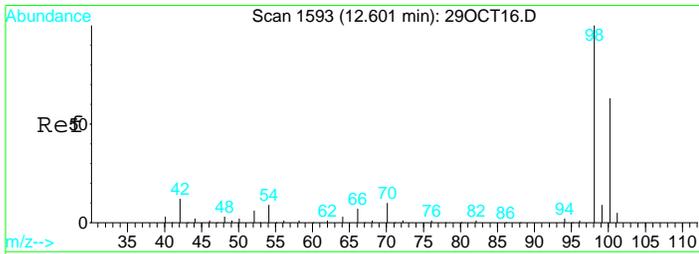
Tgt Ion	Resp	Lower	Upper
114	244352		
114	100		
88	16.1	11.7	21.7
63	24.9	16.7	30.9



#25
 Trichloroethene
 Concen: 0.46 ug/L
 RT: 7.60 min Scan# 1151
 Delta R.T. 0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

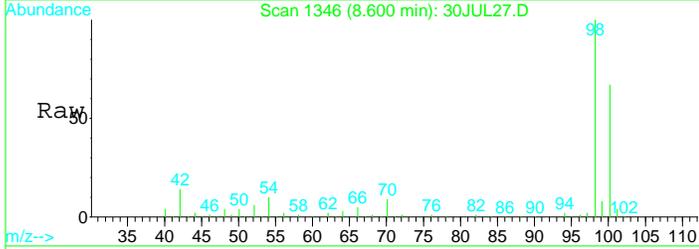
Tgt Ion	Resp	Lower	Upper
130	3841		
130	100		
132	104.5	66.1	122.7
95	84.8	86.1	159.9#
97	46.1	52.8	98.0#



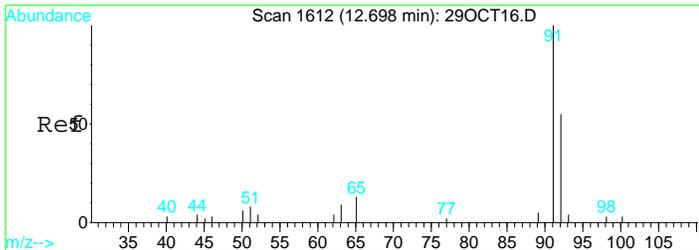
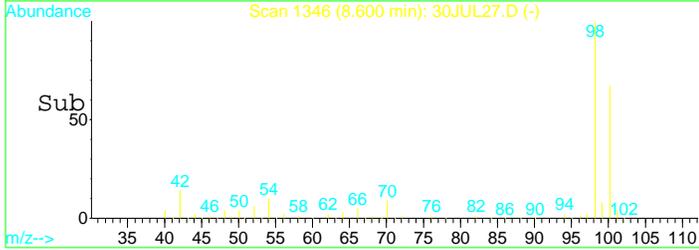
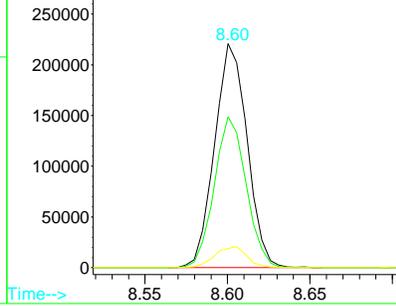


#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion	Resp	Lower	Upper
98	100		
100	65.8	49.7	92.3
70	9.4	7.3	13.7

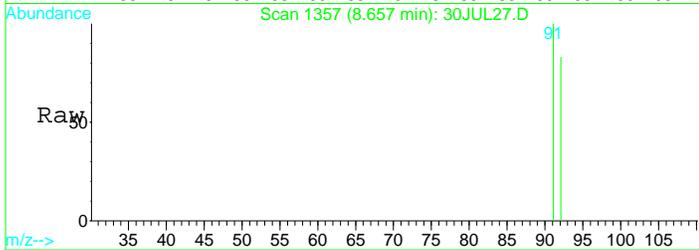


Abundance Ion 98.10 (97.60 to 98.60): 30JUL27.D
 Ion 100.10 (99.60 to 100.60): 30JUL27.D
 Ion 70.10 (69.60 to 70.60): 30JUL27.D

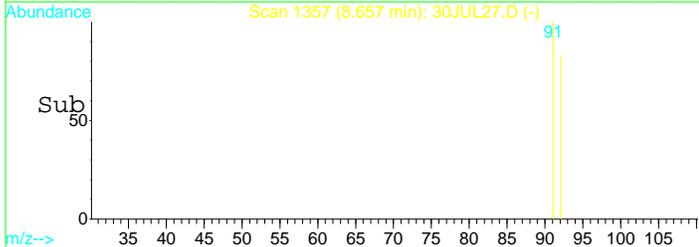
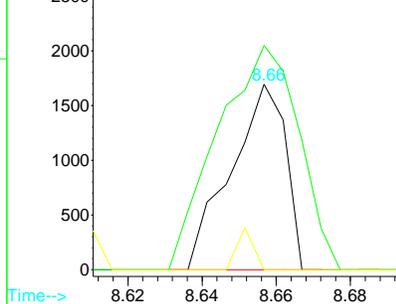


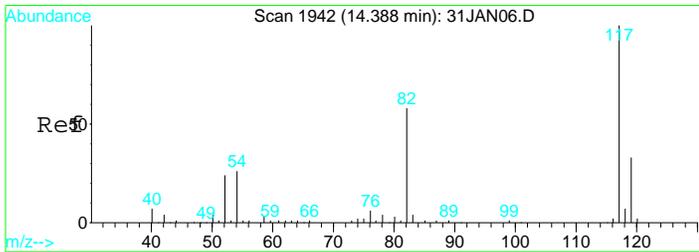
#32
 Toluene
 Concen: 0.08 ug/L
 RT: 8.66 min Scan# 1357
 Delta R.T. 0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion	Resp	Lower	Upper
92	100		
91	180.3	122.6	227.6
65	6.8	16.5	30.7#



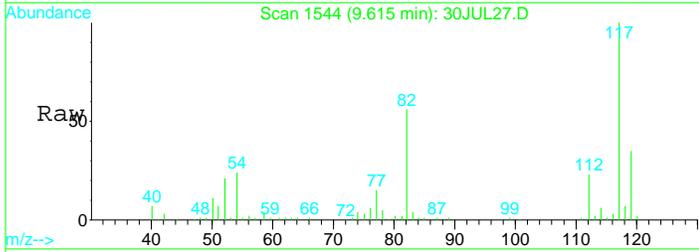
Abundance Ion 92.10 (91.60 to 92.60): 30JUL27.D
 Ion 91.10 (90.60 to 91.60): 30JUL27.D
 Ion 65.10 (64.60 to 65.60): 30JUL27.D



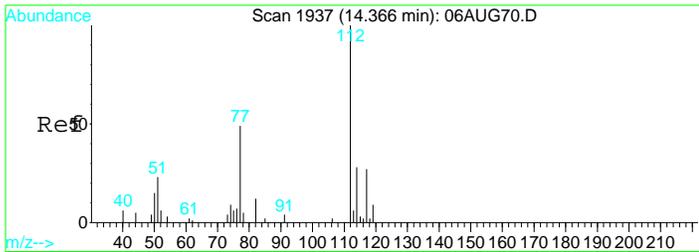
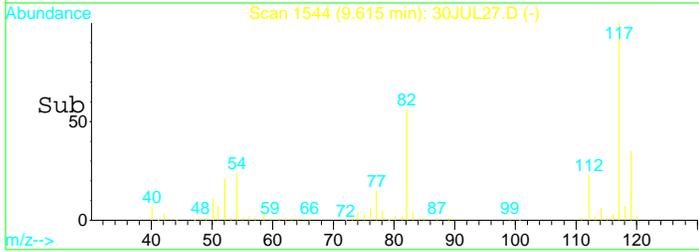
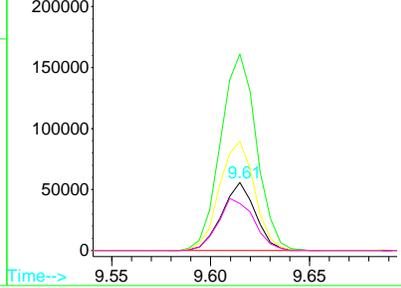


#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1544
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion	Resp	Lower	Upper
119	65937		
117	308.2	214.5	398.4
82	167.5	117.7	218.7
54	81.6	55.2	102.4

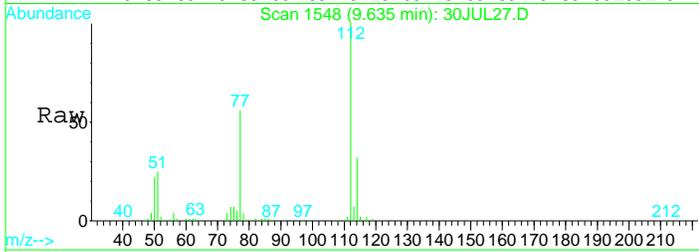


Abundance
 Ion 119.00 (118.50 to 119.50): 30JUL27.D
 Ion 117.00 (116.50 to 117.50): 30JUL27.D
 Ion 82.10 (81.60 to 82.60): 30JUL27.D
 Ion 54.10 (53.60 to 54.60): 30JUL27.D

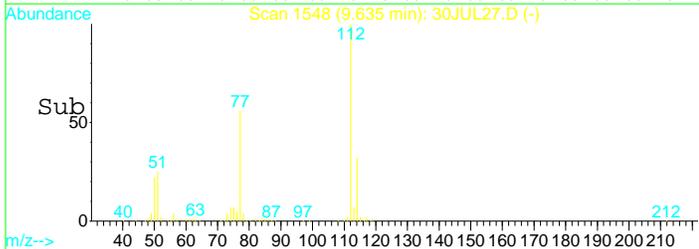
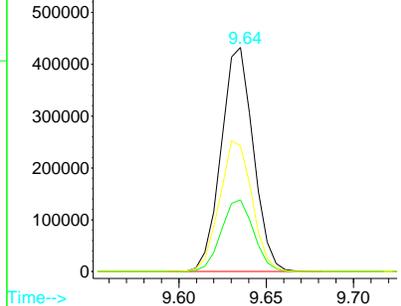


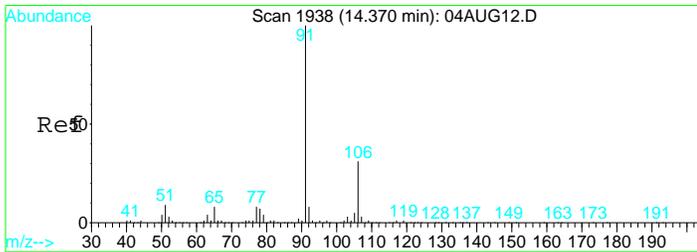
#40
 Chlorobenzene
 Concen: 25.47 ug/L
 RT: 9.64 min Scan# 1548
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion	Resp	Lower	Upper
112	556870		
114	32.1	20.6	38.4
77	58.6	48.4	90.0



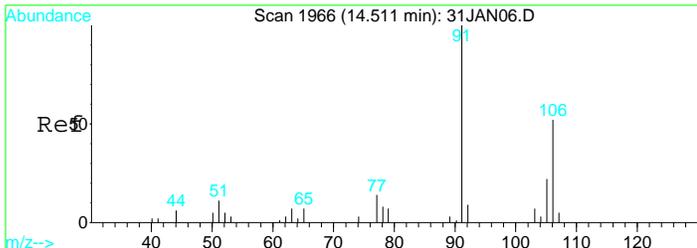
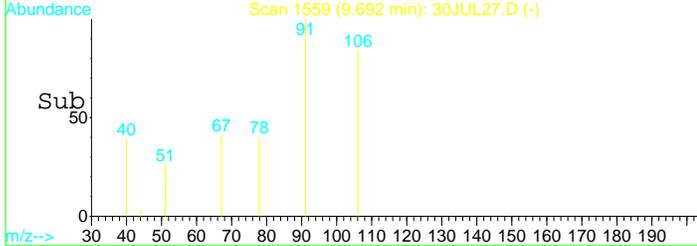
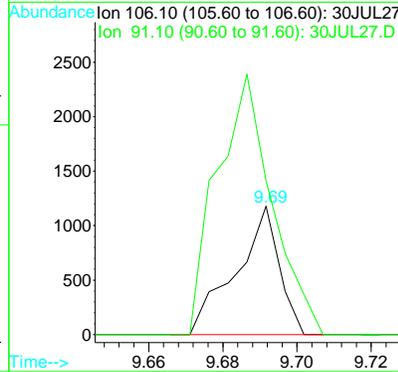
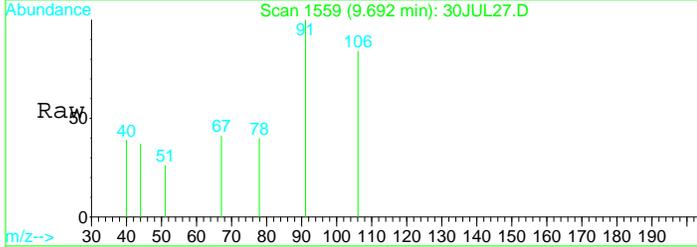
Abundance
 Ion 112.00 (111.50 to 112.50): 30JUL27.D
 Ion 114.00 (113.50 to 114.50): 30JUL27.D
 Ion 77.10 (76.60 to 77.60): 30JUL27.D





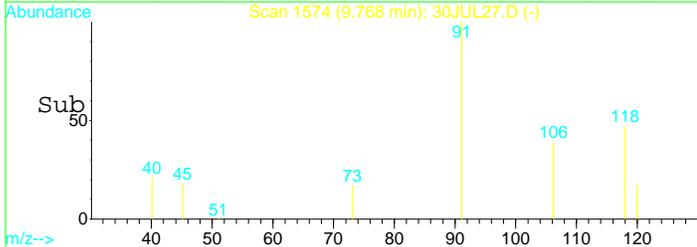
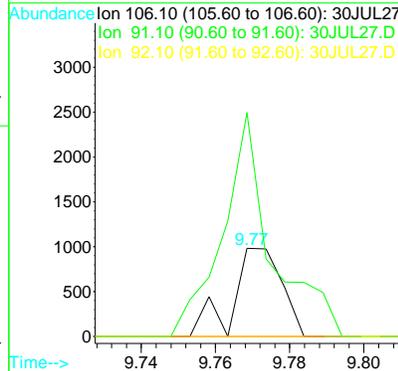
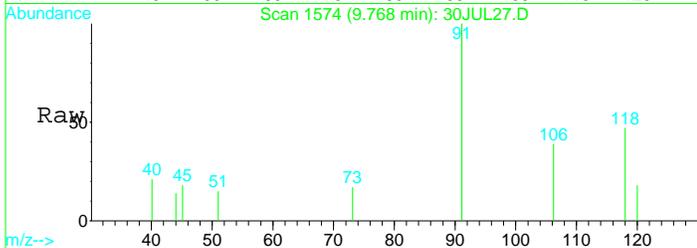
#42
 Ethylbenzene
 Concen: 0.07 ug/L
 RT: 9.69 min Scan# 1559
 Delta R.T. 0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

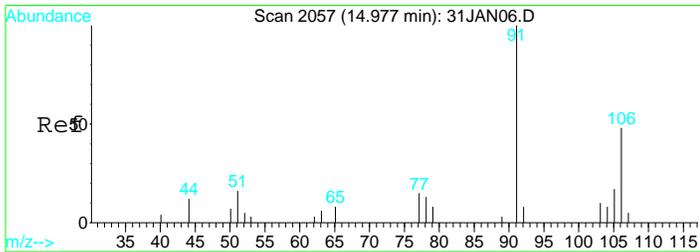
Tgt Ion	Resp	Lower	Upper
106	955		
106	100		
91	256.4	241.5	448.5



#43
 P+m-Xylene
 Concen: 0.06 ug/L
 RT: 9.77 min Scan# 1574
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

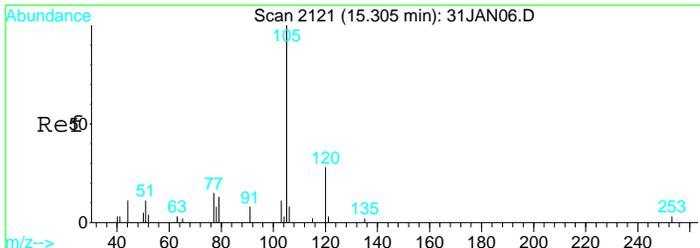
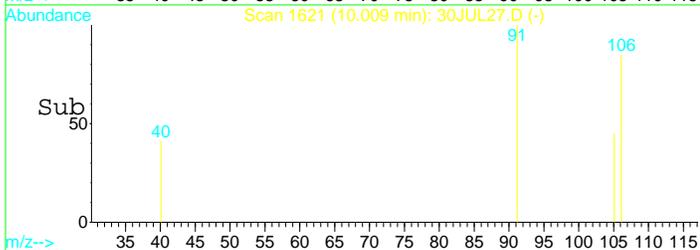
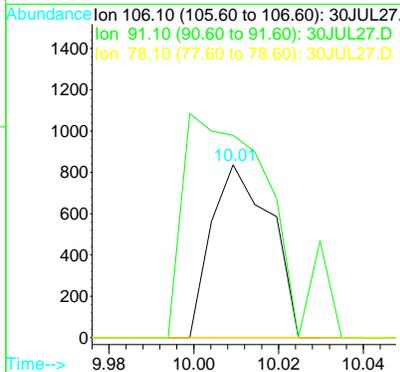
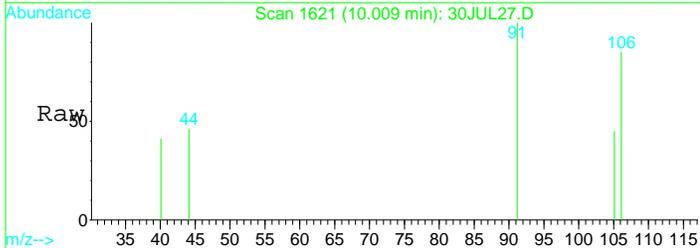
Tgt Ion	Resp	Lower	Upper
106	905		
106	100		
91	252.3	135.0	250.6#
92	0.0	10.3	19.1#





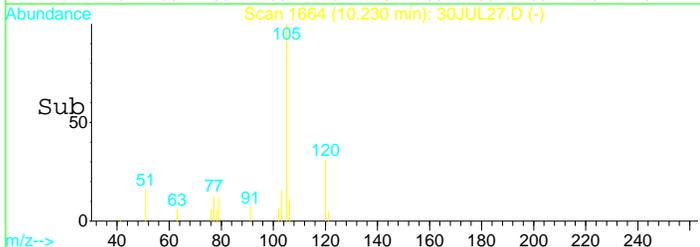
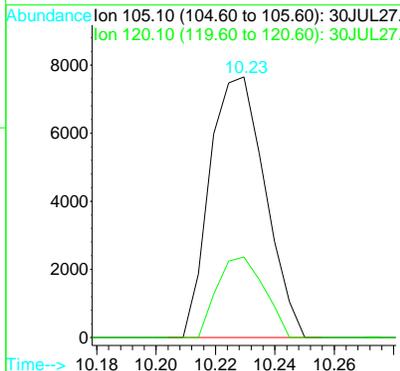
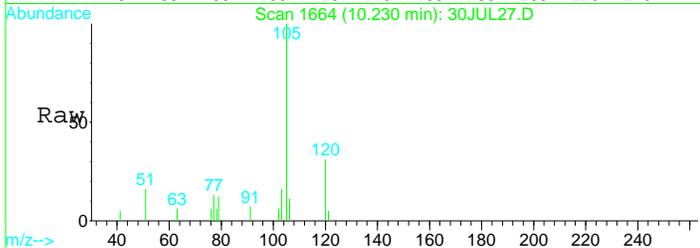
#44
 O-Xylene
 Concen: 0.06 ug/L
 RT: 10.01 min Scan# 1621
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

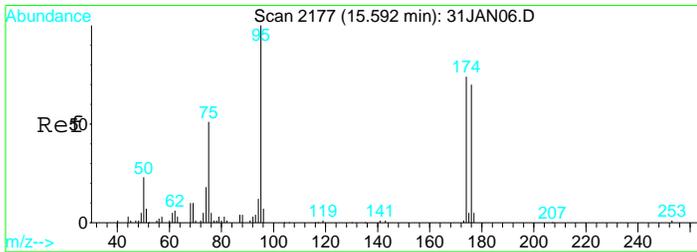
Tgt Ion	Resp	Lower	Upper
106	100		
91	194.2	154.3	286.5
78	0.0	47.1	87.5#



#47
 Isopropylbenzene
 Concen: 0.26 ug/L
 RT: 10.23 min Scan# 1664
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

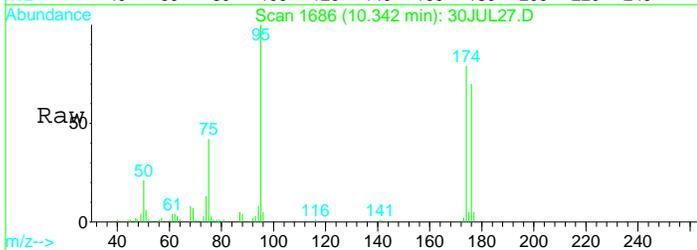
Tgt Ion	Resp	Lower	Upper
105	100		
120	26.3	19.2	35.6



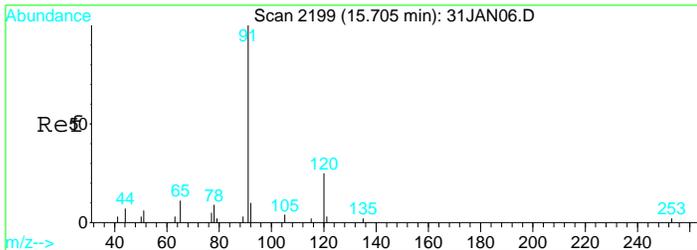
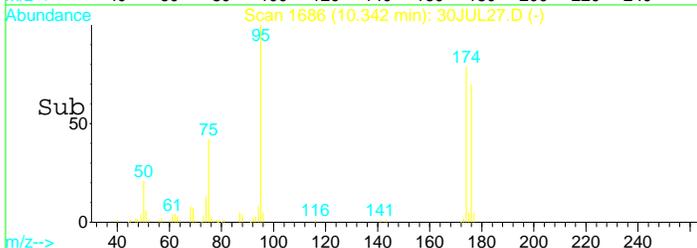
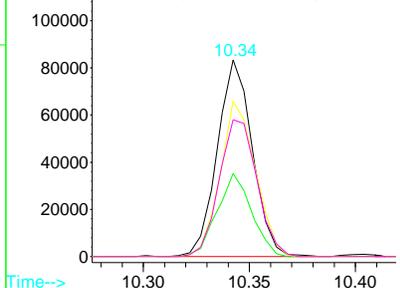


#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion	Resp	Lower	Upper
95	96109	100	
75	41.3	29.5	54.7
174	79.1	52.3	97.1
176	74.7	49.6	92.2

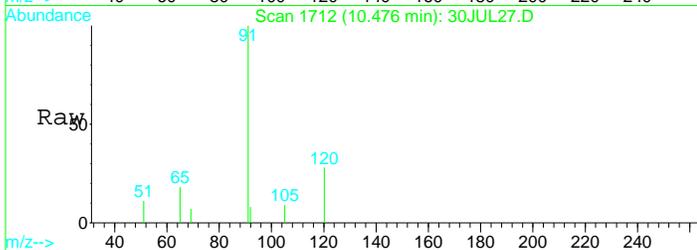


Abundance Ion 95.00 (94.50 to 95.50): 30JUL27.D
 Ion 75.00 (74.50 to 75.50): 30JUL27.D
 Ion 173.90 (173.40 to 174.40): 30JUL27.D
 Ion 175.90 (175.40 to 176.40): 30JUL27.D

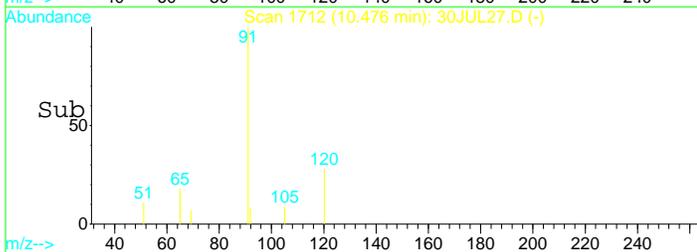
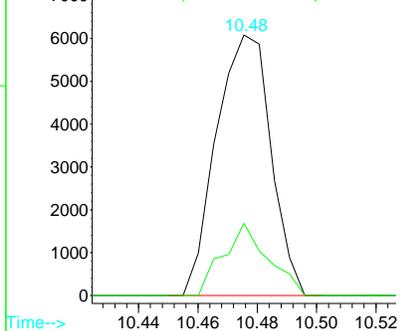


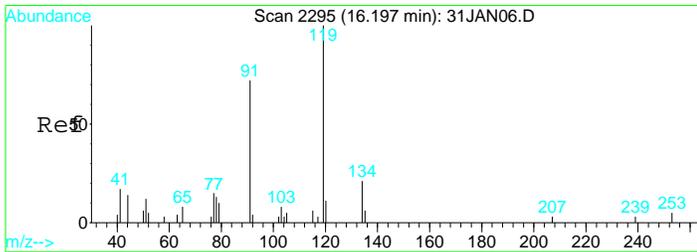
#51
 n-propylbenzene
 Concen: 0.16 ug/L
 RT: 10.48 min Scan# 1712
 Delta R.T. 0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion	Resp	Lower	Upper
91	7751	100	
120	22.7	14.8	27.6



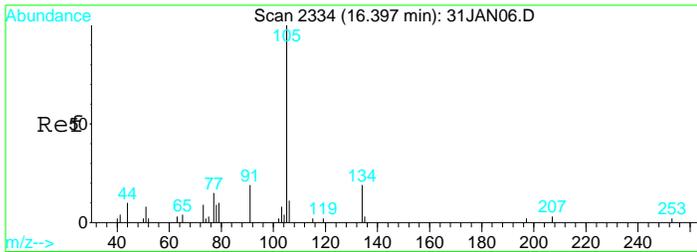
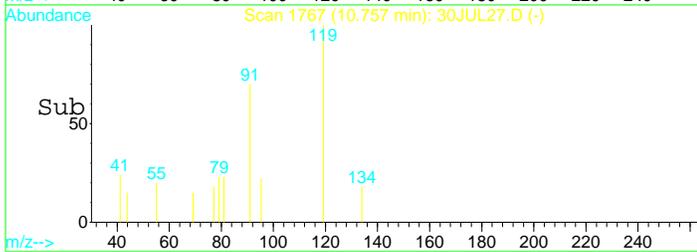
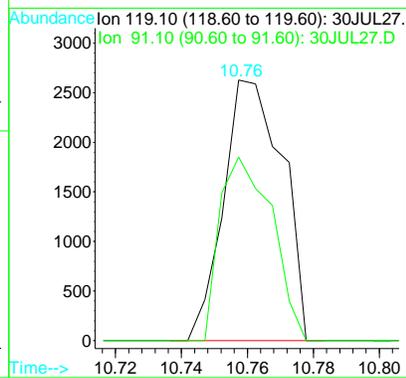
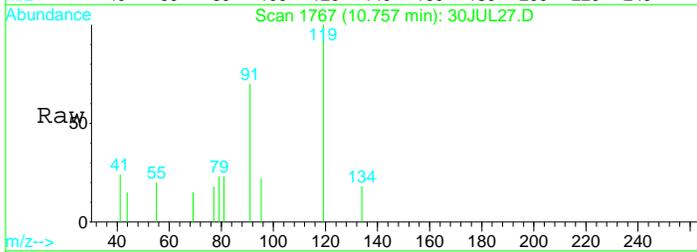
Abundance Ion 91.10 (90.60 to 91.60): 30JUL27.D
 Ion 120.10 (119.60 to 120.60): 30JUL27.D





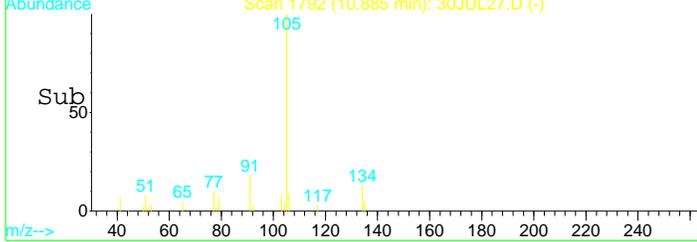
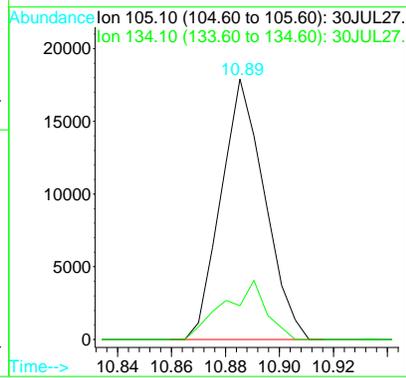
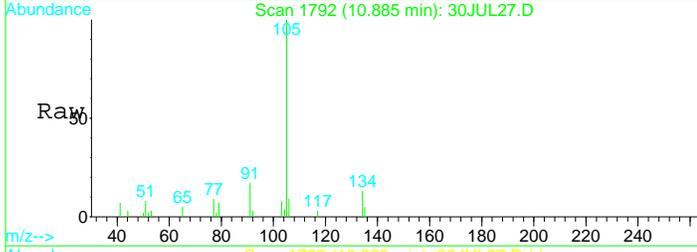
#56
 tert-butylbenzene
 Concen: 0.11 ug/L
 RT: 10.76 min Scan# 1767
 Delta R.T. -0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

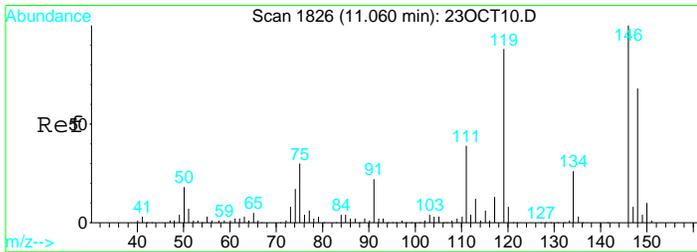
Tgt Ion:119 Resp: 3261
 Ion Ratio Lower Upper
 119 100
 91 62.5 48.7 90.5



#58
 sec-butylbenzene
 Concen: 0.48 ug/L
 RT: 10.89 min Scan# 1792
 Delta R.T. -0.00 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

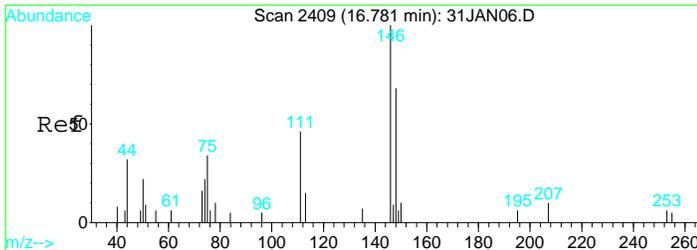
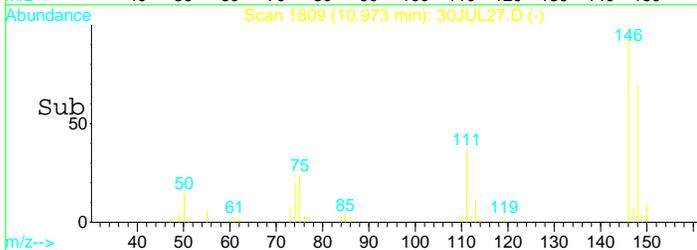
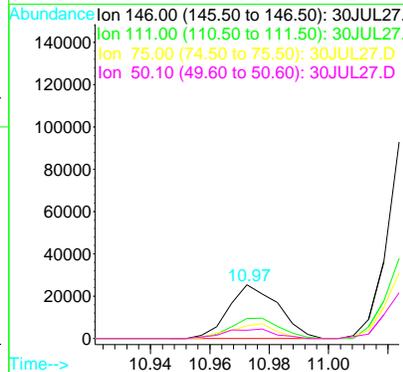
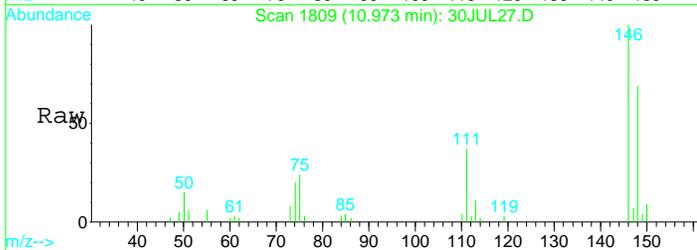
Tgt Ion:105 Resp: 20135
 Ion Ratio Lower Upper
 105 100
 134 22.0 14.4 26.7





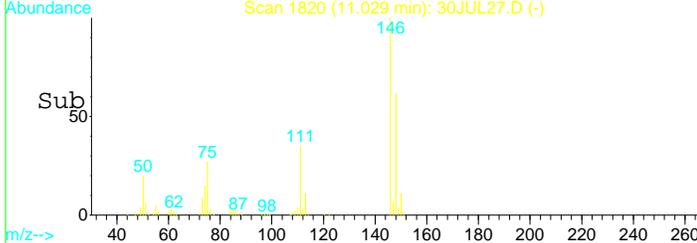
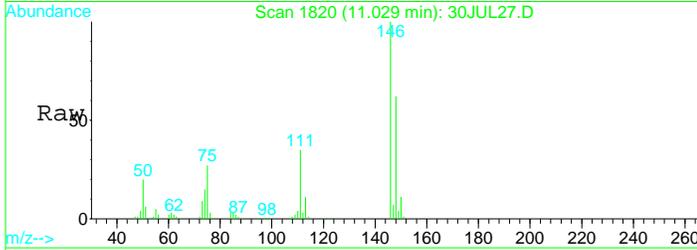
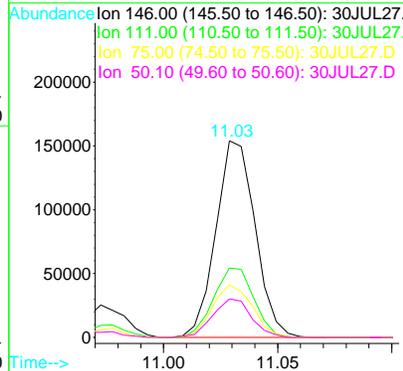
#60
 1,3-Dichlorobenzene
 Concen: 1.79 ug/L
 RT: 10.97 min Scan# 1809
 Delta R.T. -0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

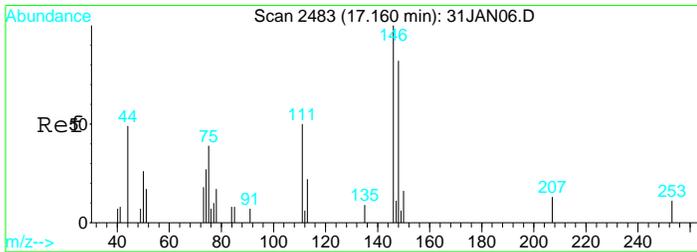
Tgt Ion	Resp	Lower	Upper
146	100		
111	37.9	28.8	53.6
75	25.1	24.0	44.6
50	18.2	14.6	27.0



#61
 1,4-Dichlorobenzene
 Concen: 11.43 ug/L
 RT: 11.03 min Scan# 1820
 Delta R.T. -0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

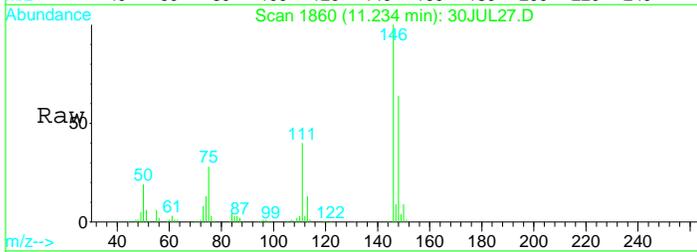
Tgt Ion	Resp	Lower	Upper
146	100		
111	36.3	28.1	52.3
75	27.3	20.3	37.7
50	19.3	16.0	29.6



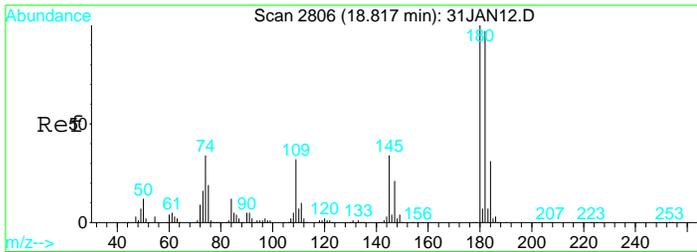
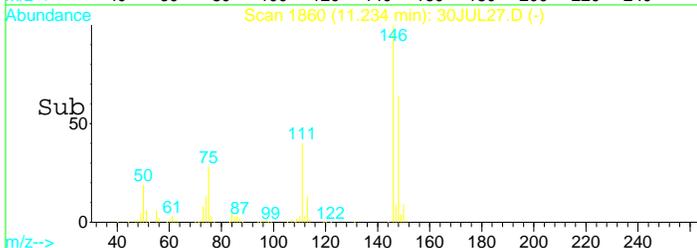
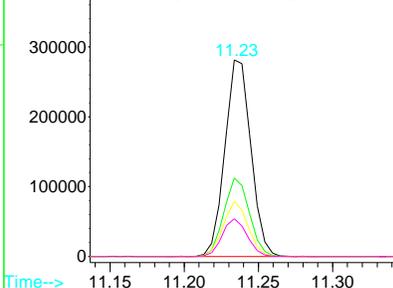


#63
 1,2-Dichlorobenzene
 Concen: 24.00 ug/L
 RT: 11.23 min Scan# 1860
 Delta R.T. -0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion	Resp	Lower	Upper
146	341326		
111	39.3	28.8	53.6
75	26.8	19.8	36.8
50	18.5	9.7	17.9

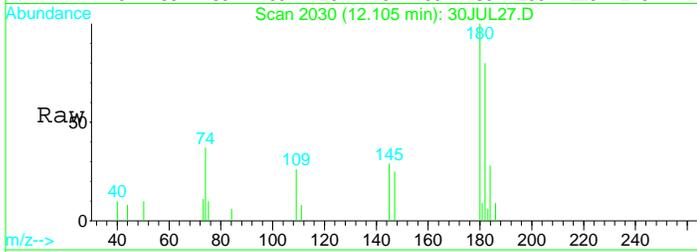


Abundance
 Ion 146.00 (145.50 to 146.50): 30JUL27.D
 Ion 111.00 (110.50 to 111.50): 30JUL27.D
 Ion 75.00 (74.50 to 75.50): 30JUL27.D
 Ion 50.10 (49.60 to 50.60): 30JUL27.D

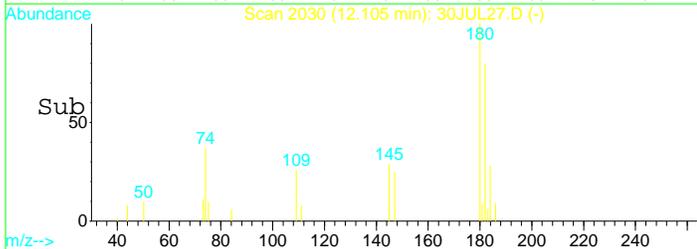
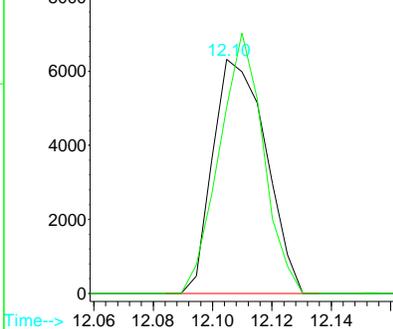


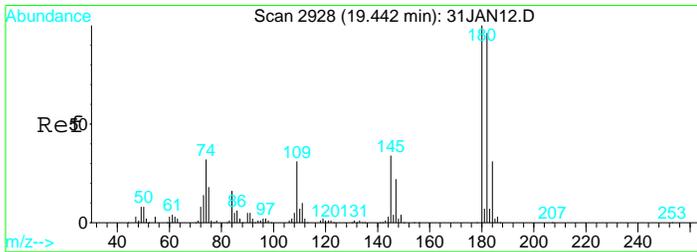
#66
 1,2,4-trichlorobenzene
 Concen: 0.95 ug/L
 RT: 12.10 min Scan# 2030
 Delta R.T. -0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion	Resp	Lower	Upper
180	7846		
182	92.1	65.4	121.4



Abundance
 Ion 179.90 (179.40 to 180.40): 30JUL27.D
 Ion 181.90 (181.40 to 182.40): 30JUL27.D

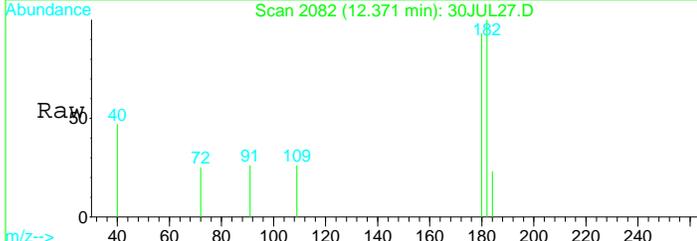




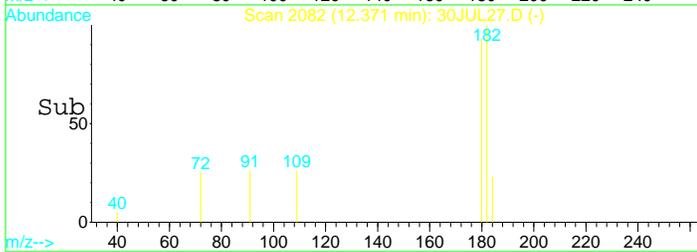
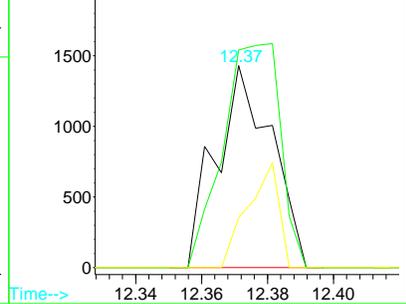
#69
 1,2,3-trichlorobenzene
 Concen: 0.24 ug/L
 RT: 12.37 min Scan# 2082
 Delta R.T. -0.01 min
 Lab File: 30JUL27.D
 Acq: 30 Jul 2017 5:43 pm

Tgt Ion:180 Resp: 1672

Ion	Ratio	Lower	Upper
180	100		
182	114.4	61.7	114.5
184	29.2	15.3	28.3#



Abundance
 Ion 180.00 (179.50 to 180.50): 30JUL27.
 Ion 181.90 (181.40 to 182.40): 30JUL27.
 Ion 183.90 (183.40 to 184.40): 30JUL27.



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL02.D Vial: 2
 Acq On : 29 Jul 2017 2:55 pm Operator: MGC
 Sample : 1720405-16 Inst : MS-V5
 Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:08 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	171437	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	258263	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	68812	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	52317	10.45	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	104.50%
31) Toluene d8 SMC#2	8.60	98	302585	9.49	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.90%
49) Bromofluorobenzene SMC#3	10.34	95	99365	9.67	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.70%

Target Compounds

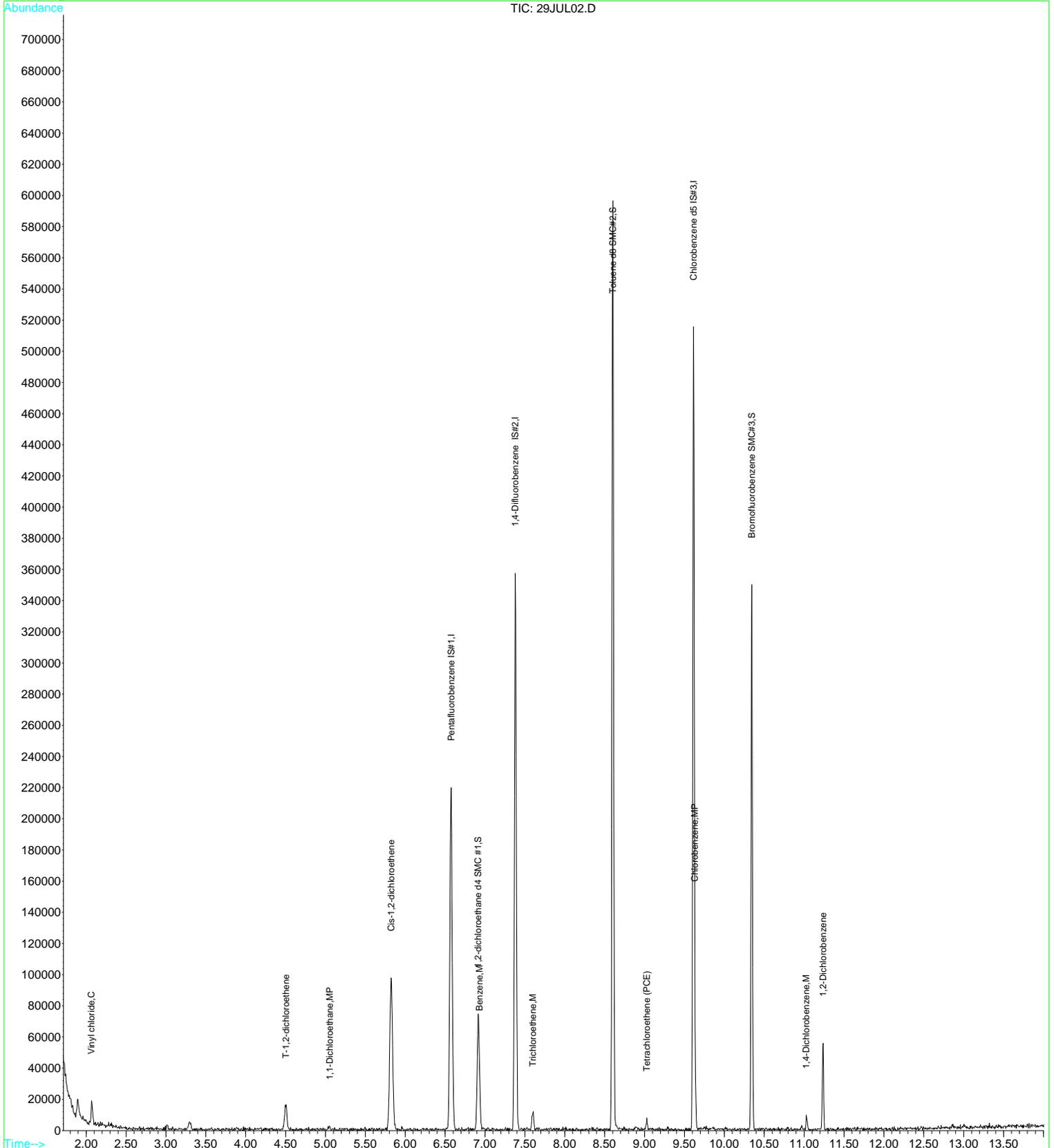
	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	13668	1.06	ug/L	97
12) T-1,2-dichloroethene	4.51	96	6559	0.76	ug/L	88
13) 1,1-Dichloroethane	5.05	63	2160	0.12	ug/L #	60
15) Cis-1,2-dichloroethene	5.82	96	54892	6.13	ug/L	87
23) Benzene	6.93	78	3902	0.11	ug/L #	1
25) Trichloroethene	7.59	130	3999	0.45	ug/L	86
35) Tetrachloroethene (PCE)	9.03	166	1285	0.15	ug/L #	80
40) Chlorobenzene	9.63	112	16246	0.71	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	3299	0.20	ug/L #	87
63) 1,2-Dichlorobenzene	11.24	146	19589	1.32	ug/L #	91

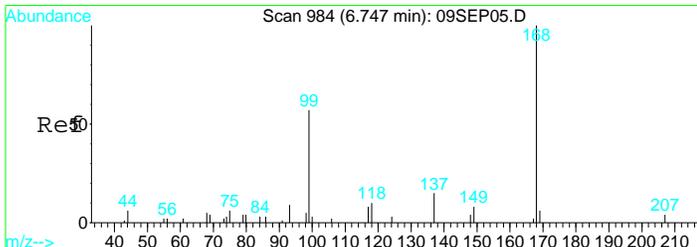
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL02.D
Acq On : 29 Jul 2017 2:55 pm
Sample : 1720405-16
Misc : 1 Unspiked;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:08 2017

Vial: 2
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

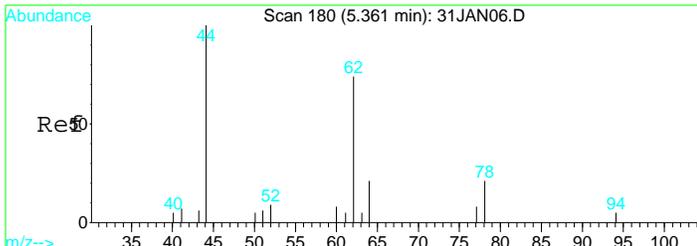
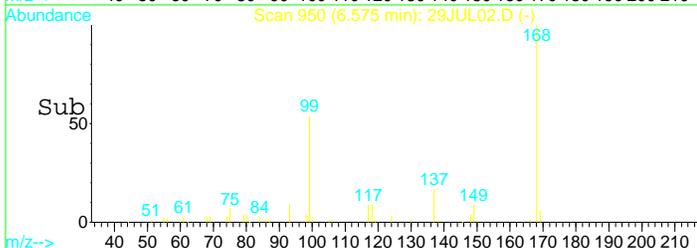
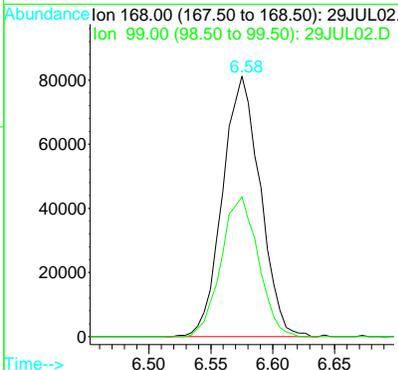
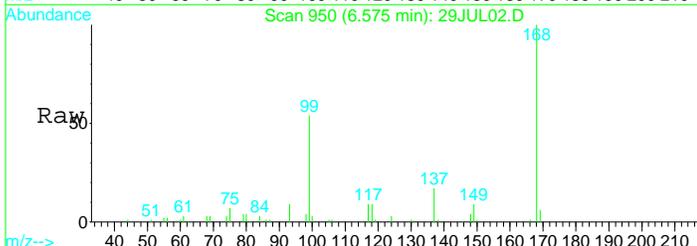
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





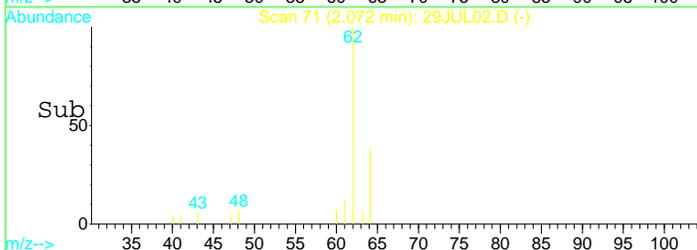
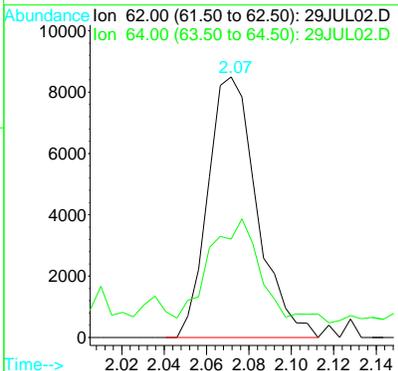
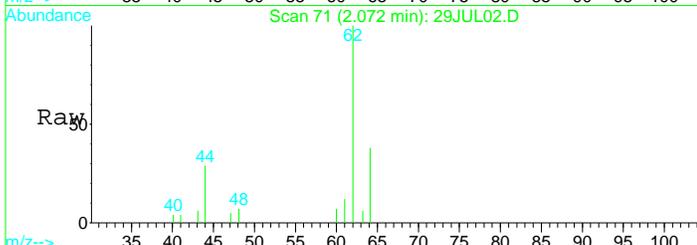
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.58 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

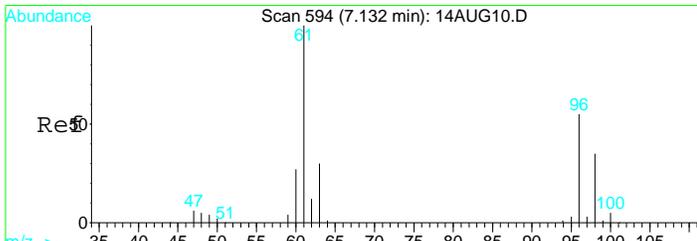
Tgt Ion: 168 Resp: 171437
 Ion Ratio Lower Upper
 168 100
 99 52.9 38.7 71.9



#4
 Vinyl chloride
 Concen: 1.06 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

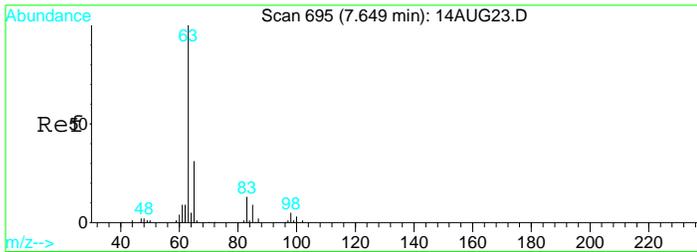
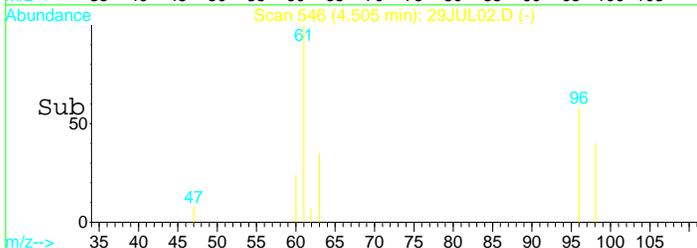
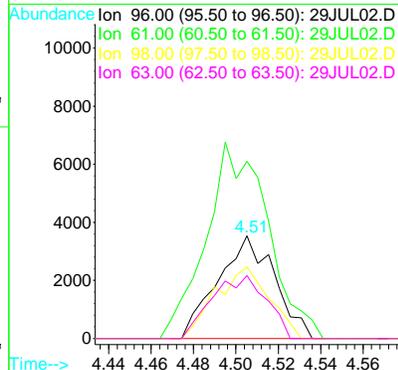
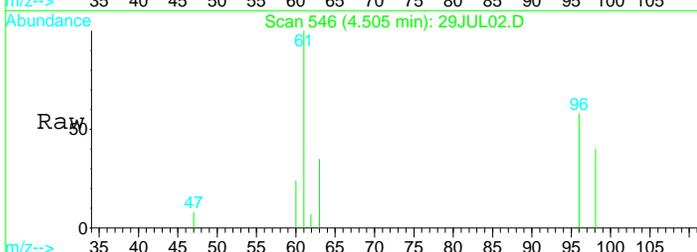
Tgt Ion: 62 Resp: 13668
 Ion Ratio Lower Upper
 62 100
 64 58.2 39.3 72.9





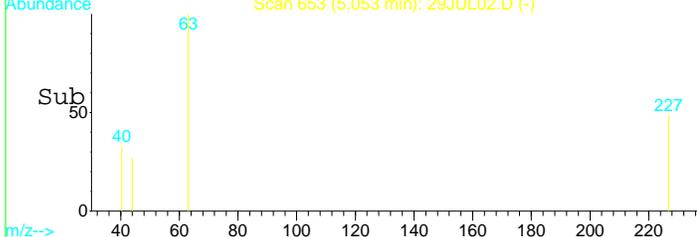
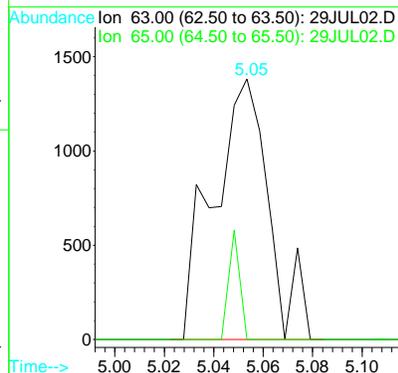
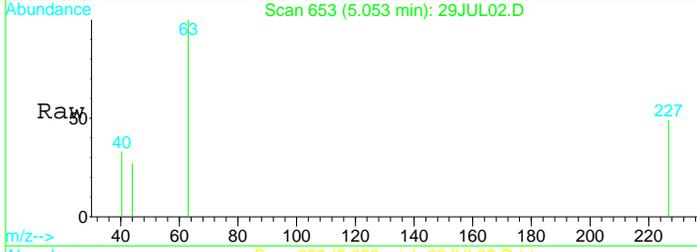
#12
 T-1,2-dichloroethene
 Concen: 0.76 ug/L
 RT: 4.51 min Scan# 546
 Delta R.T. 0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

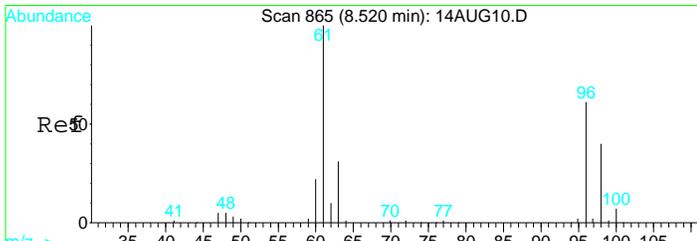
Tgt Ion	Resp	Lower	Upper
96	6559		
100			
61	207.7	129.4	240.4
98	66.5	41.5	77.1
63	59.5	39.3	73.1



#13
 1,1-Dichloroethane
 Concen: 0.12 ug/L
 RT: 5.05 min Scan# 653
 Delta R.T. 0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

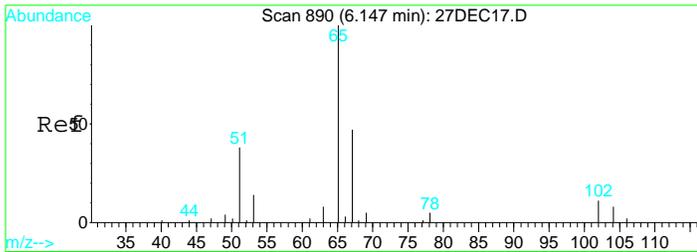
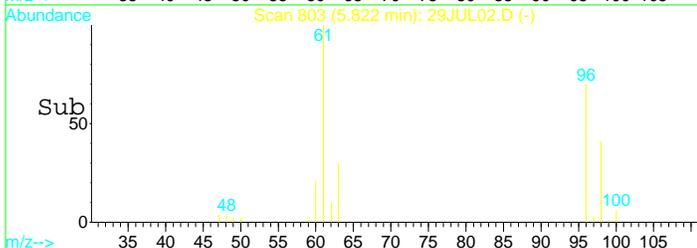
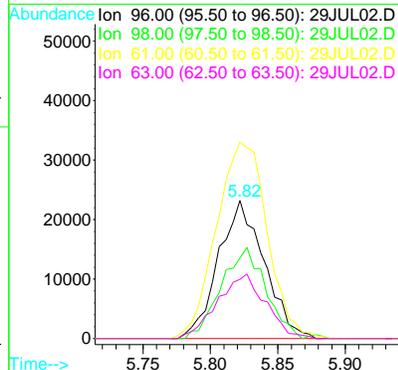
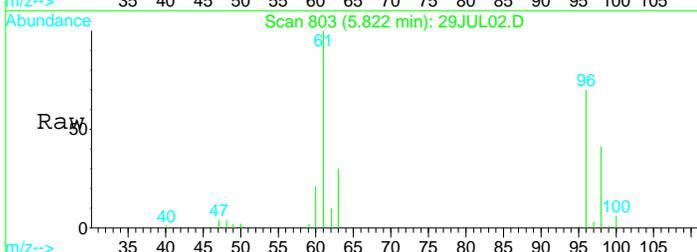
Tgt Ion	Resp	Lower	Upper
63	2160		
100			
65	8.3	20.8	38.6#





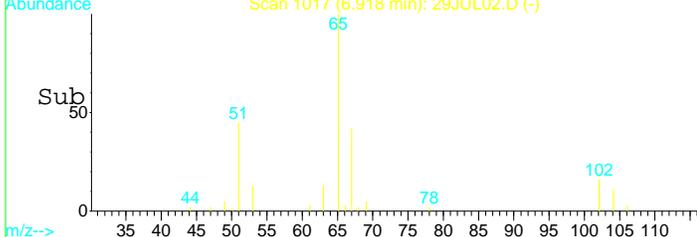
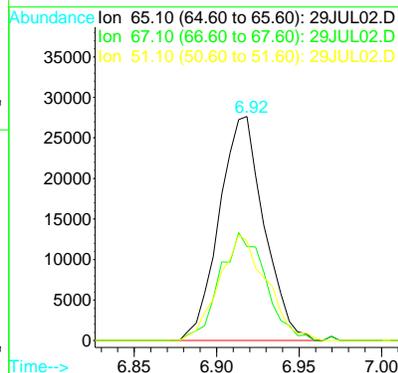
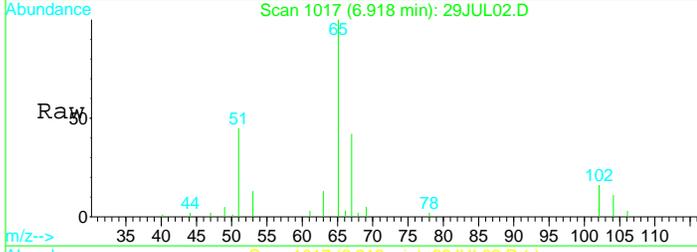
#15
 Cis-1,2-dichloroethene
 Concen: 6.13 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

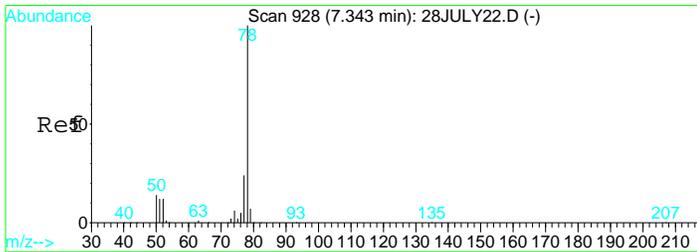
Tgt Ion	Resp	Lower	Upper
96	54892		
100			
98	64.0	51.9	96.3
61	157.6	122.8	228.0
63	48.8	42.1	78.3



#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1017
 Delta R.T. 0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

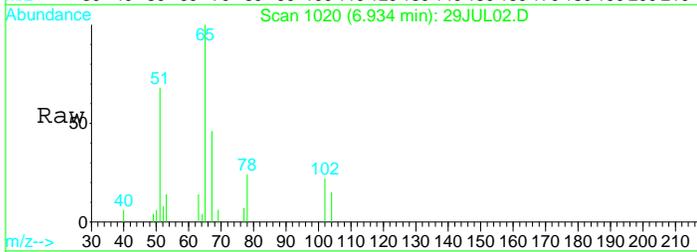
Tgt Ion	Resp	Lower	Upper
65	52317		
100			
67	49.0	36.2	67.2
51	50.1	42.0	78.0



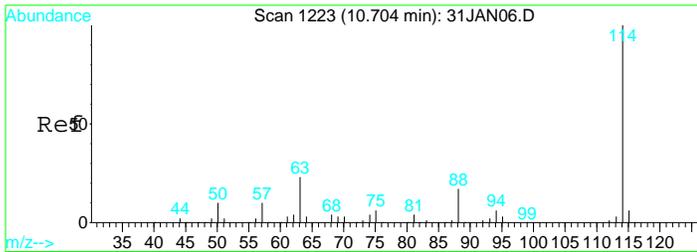
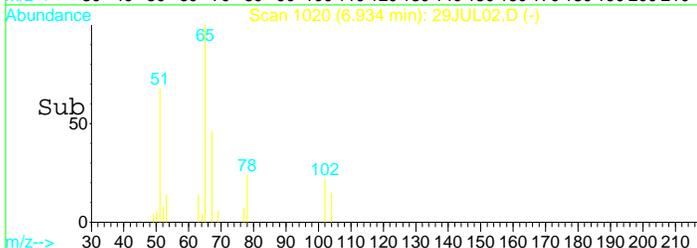
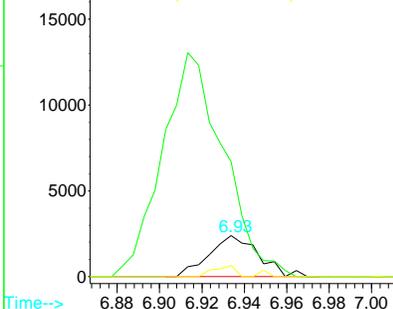


#23
 Benzene
 Concen: 0.11 ug/L
 RT: 6.93 min Scan# 1020
 Delta R.T. -0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

Tgt Ion	Resp	Lower	Upper
78	100		
51	671.6	114.8	213.2#
77	11.7	15.2	28.2#

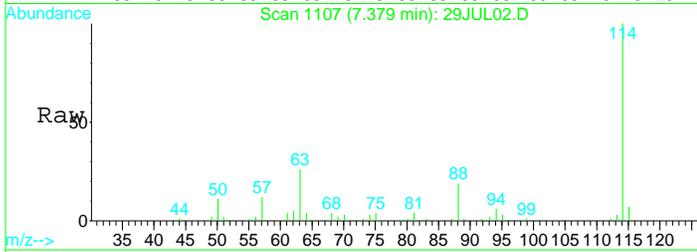


Abundance
 Ion 78.10 (77.60 to 78.60): 29JUL02.D
 Ion 51.10 (50.60 to 51.60): 29JUL02.D
 Ion 77.10 (76.60 to 77.60): 29JUL02.D

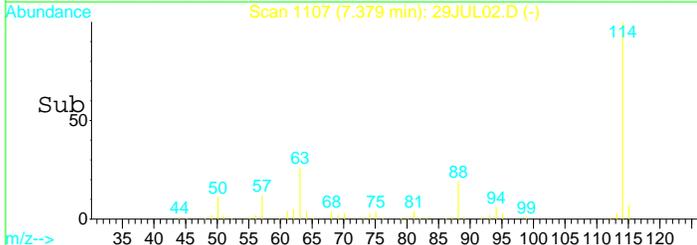
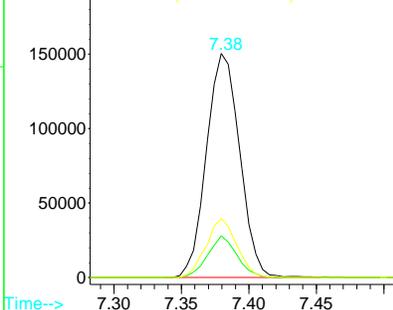


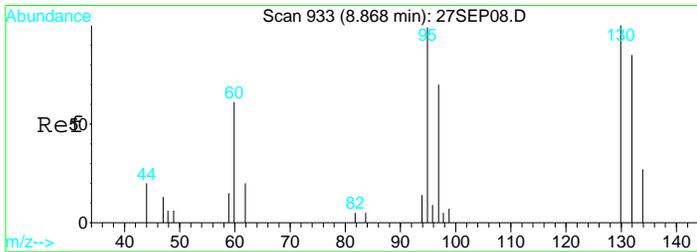
#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

Tgt Ion	Resp	Lower	Upper
114	100		
88	16.4	11.7	21.7
63	24.2	16.7	30.9



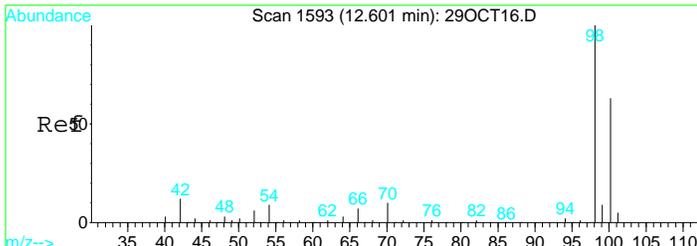
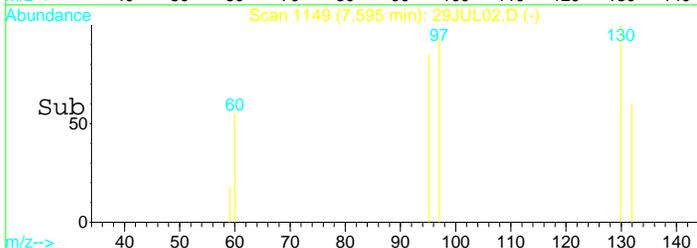
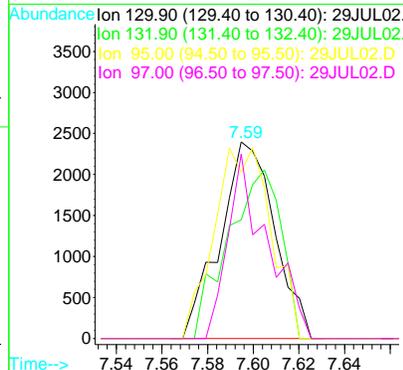
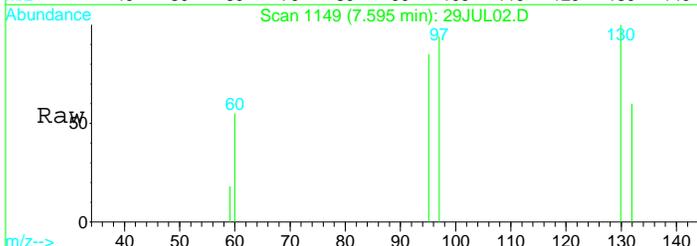
Abundance
 Ion 114.00 (113.50 to 114.50): 29JUL02.D
 Ion 88.00 (87.50 to 88.50): 29JUL02.D
 Ion 63.10 (62.60 to 63.60): 29JUL02.D





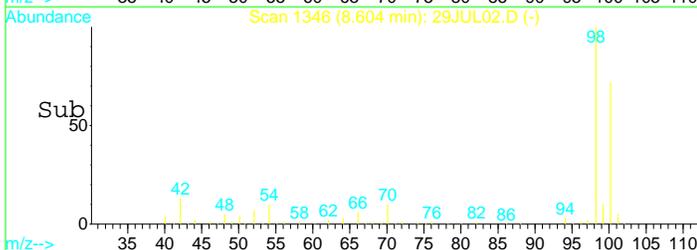
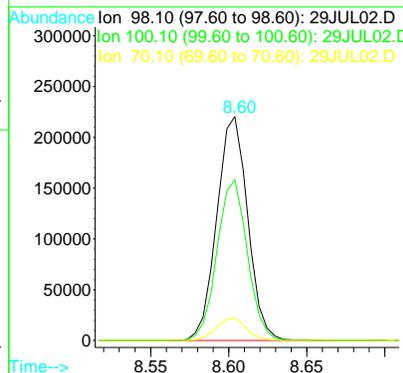
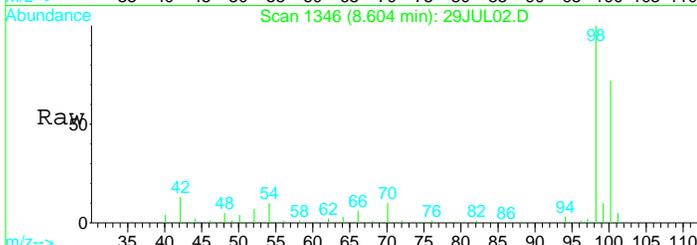
#25
 Trichloroethene
 Concen: 0.45 ug/L
 RT: 7.59 min Scan# 1149
 Delta R.T. -0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

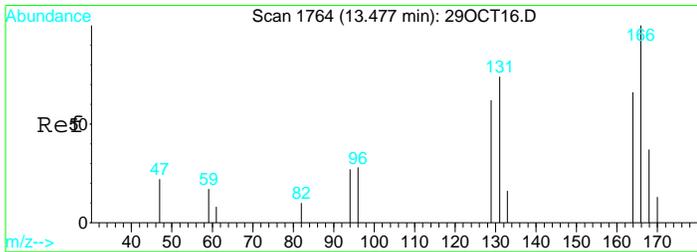
Tgt Ion	Resp	Lower	Upper
130	100		
132	83.3	66.1	122.7
95	100.9	86.1	159.9
97	67.7	52.8	98.0



#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

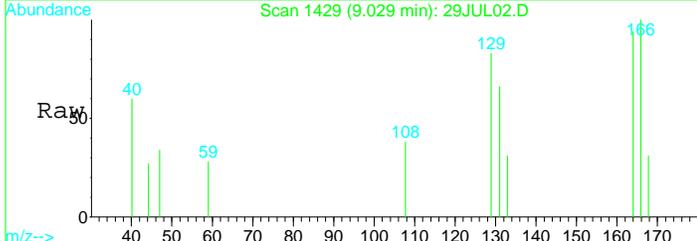
Tgt Ion	Resp	Lower	Upper
98	100		
100	70.6	49.7	92.3
70	10.0	7.3	13.7



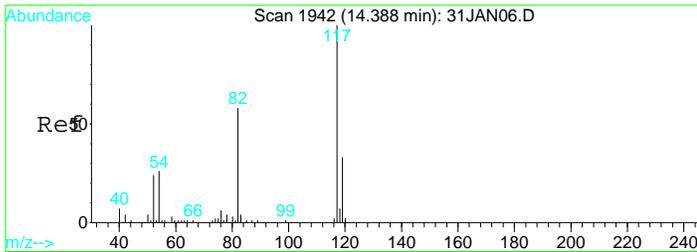
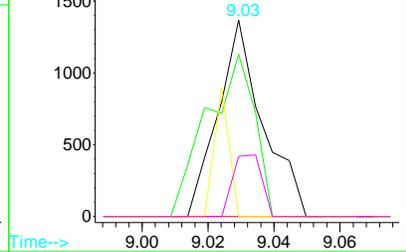
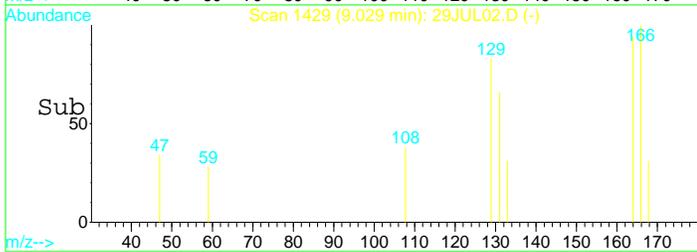


#35
 Tetrachloroethene (PCE)
 Concen: 0.15 ug/L
 RT: 9.03 min Scan# 1429
 Delta R.T. 0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

Tgt Ion	Resp	Lower	Upper
166	100		
129	88.2	54.3	100.8
94	21.5	24.1	44.7#
168	20.3	28.6	53.0#

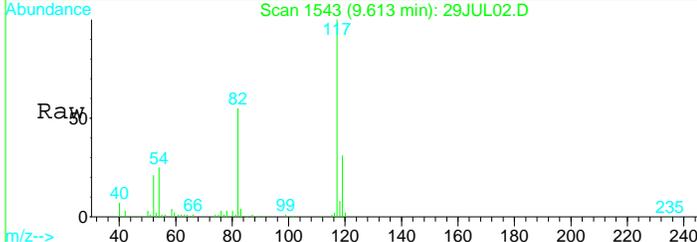


Abundance
 Ion 165.90 (165.40 to 166.40): 29JUL02.D
 Ion 128.90 (128.40 to 129.40): 29JUL02.D
 Ion 94.00 (93.50 to 94.50): 29JUL02.D
 Ion 167.90 (167.40 to 168.40): 29JUL02.D

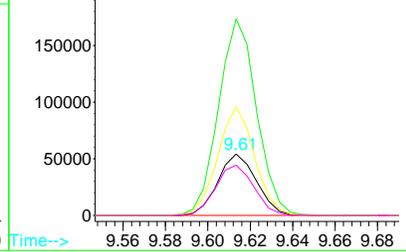
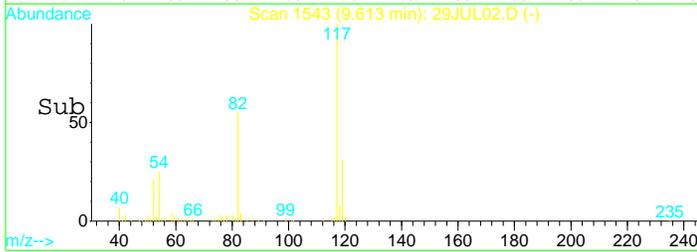


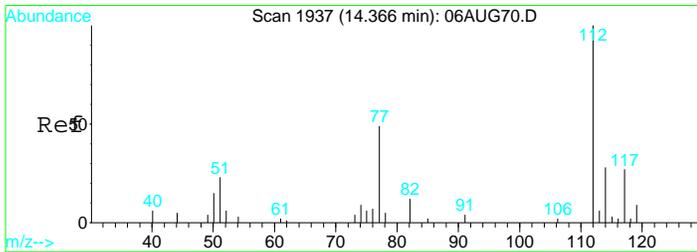
#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

Tgt Ion	Resp	Lower	Upper
119	100		
117	313.8	214.5	398.4
82	168.2	117.7	218.7
54	81.3	55.2	102.4



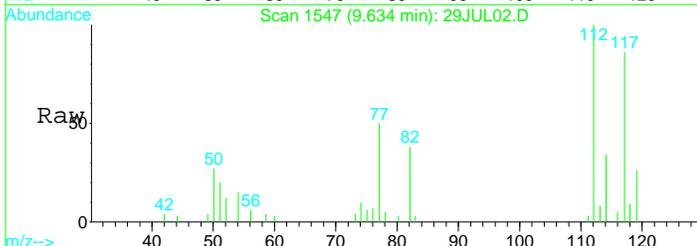
Abundance
 Ion 119.00 (118.50 to 119.50): 29JUL02.D
 Ion 117.00 (116.50 to 117.50): 29JUL02.D
 Ion 82.10 (81.60 to 82.60): 29JUL02.D
 Ion 54.10 (53.60 to 54.60): 29JUL02.D



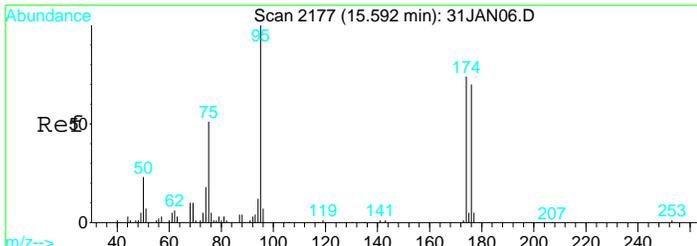
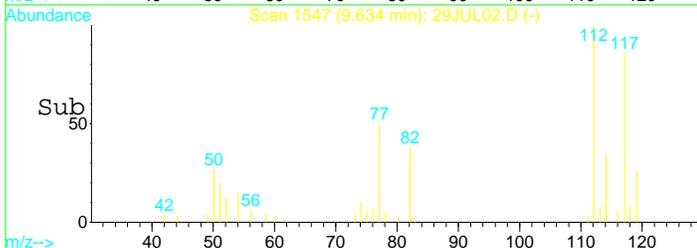
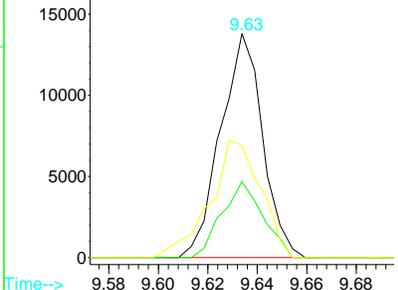


#40
 Chlorobenzene
 Concen: 0.71 ug/L
 RT: 9.63 min Scan# 1547
 Delta R.T. -0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

Tgt Ion	Resp	Lower	Upper
112	16246		
114	33.3	20.6	38.4
77	63.2	48.4	90.0

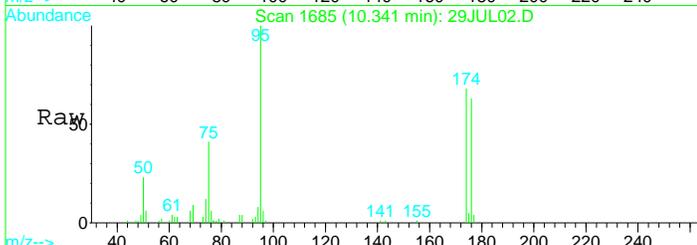


Abundance
 Ion 112.00 (111.50 to 112.50): 29JUL02.D
 Ion 114.00 (113.50 to 114.50): 29JUL02.D
 Ion 77.10 (76.60 to 77.60): 29JUL02.D

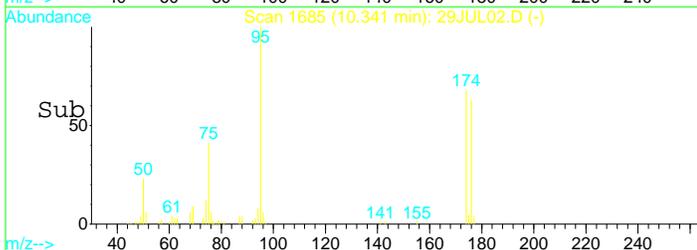
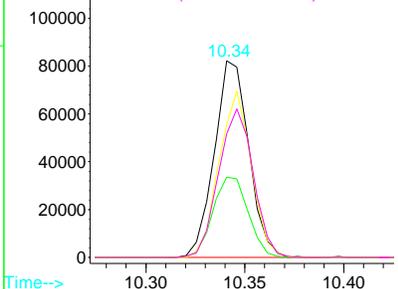


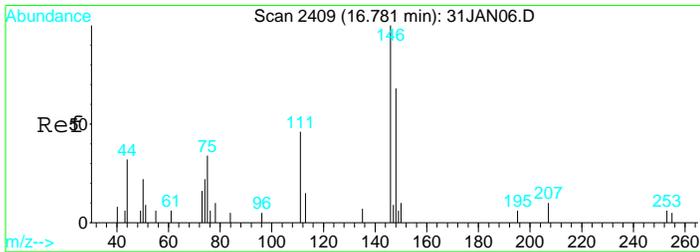
#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1685
 Delta R.T. -0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

Tgt Ion	Resp	Lower	Upper
95	99365		
75	41.8	29.5	54.7
174	79.3	52.3	97.1
176	75.9	49.6	92.2



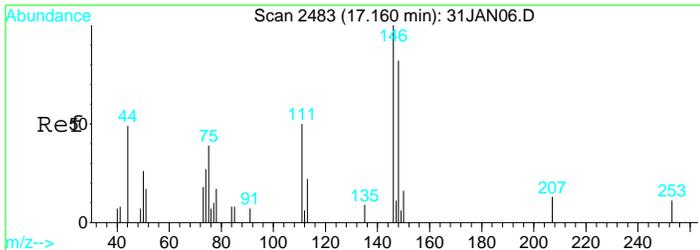
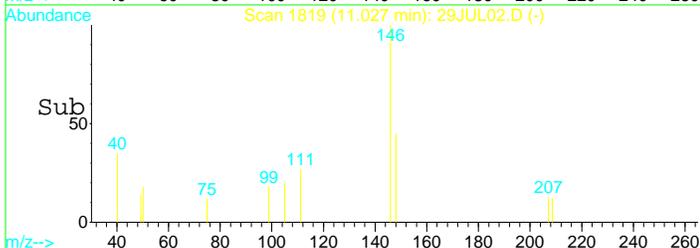
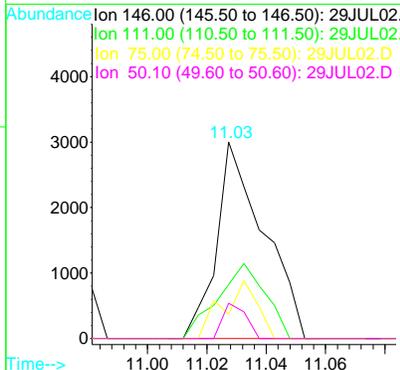
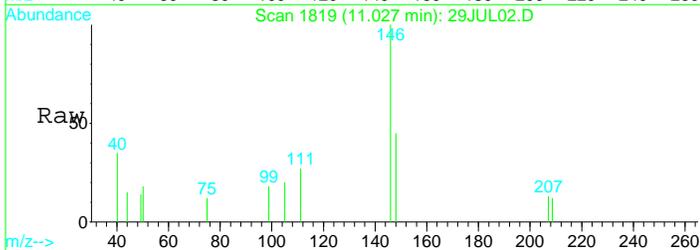
Abundance
 Ion 95.00 (94.50 to 95.50): 29JUL02.D
 Ion 75.00 (74.50 to 75.50): 29JUL02.D
 Ion 173.90 (173.40 to 174.40): 29JUL02.D
 Ion 175.90 (175.40 to 176.40): 29JUL02.D





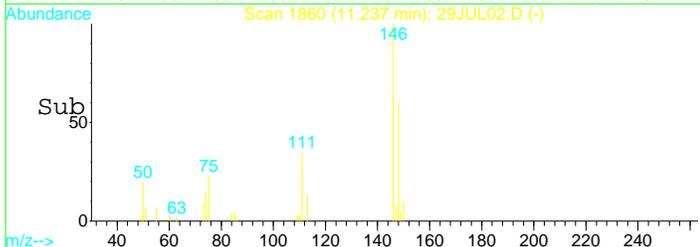
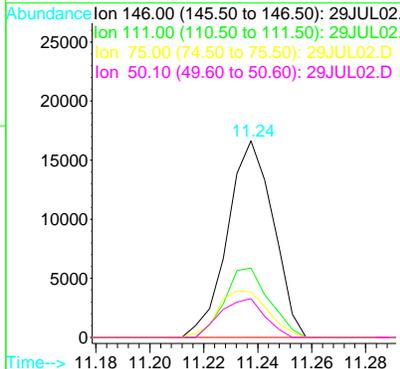
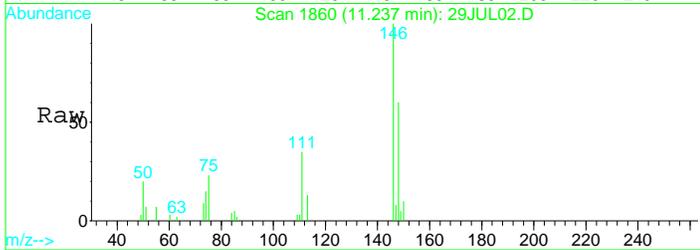
#61
 1,4-Dichlorobenzene
 Concen: 0.20 ug/L
 RT: 11.03 min Scan# 1819
 Delta R.T. -0.01 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

Tgt Ion	Resp	Lower	Upper
146	100		
111	38.6	28.1	52.3
75	21.6	20.3	37.7
50	8.8	16.0	29.6#



#63
 1,2-Dichlorobenzene
 Concen: 1.32 ug/L
 RT: 11.24 min Scan# 1860
 Delta R.T. -0.00 min
 Lab File: 29JUL02.D
 Acq: 29 Jul 2017 2:55 pm

Tgt Ion	Resp	Lower	Upper
146	100		
111	34.3	28.8	53.6
75	26.1	19.8	36.8
50	19.1	9.7	17.9#



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL02.D Vial: 2
 Acq On : 29 Jul 2017 2:55 pm Operator: MGC
 Sample : 1720405-16 Inst : MS-V5
 Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:09 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	171437	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	258263	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	68812	10.00	ug/L	0.00
Target Compounds						Qvalue
4) 1,2-dichlorotrifluoroethan	3.29	67	3855	0.34	ug/L	# 34

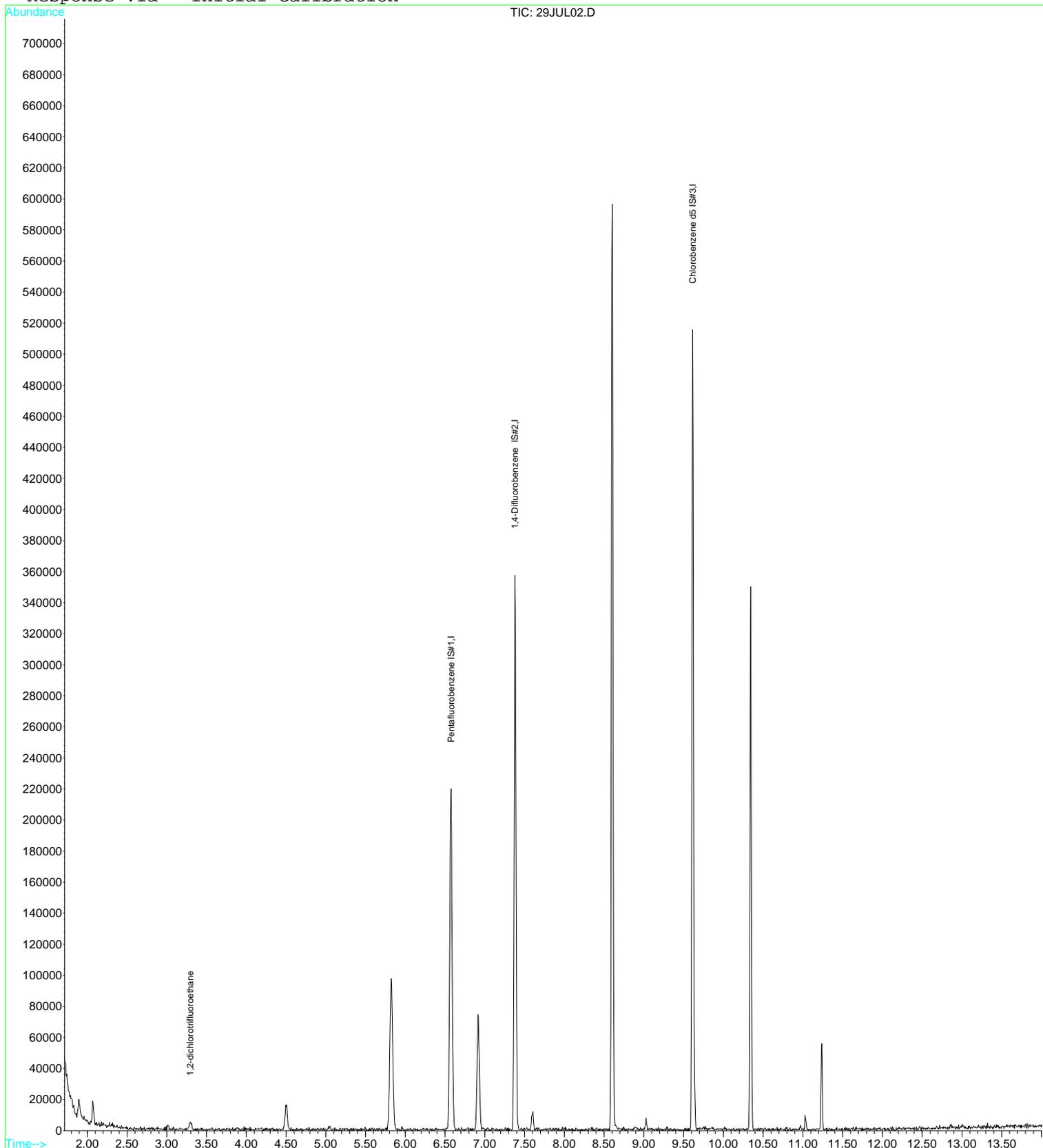
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL02.D
Acq On : 29 Jul 2017 2:55 pm
Sample : 1720405-16
Misc : 1 Unspiked;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:09 2017

Vial: 2
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL25.D
 Acq On : 29 Jul 2017 11:44 pm
 Sample : 1720405-17
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:35 2017

Vial: 25
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172400	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	254000	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	68091	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	51028	10.13	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	101.30%
31) Toluene d8 SMC#2	8.60	98	301438	9.61	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.10%
49) Bromofluorobenzene SMC#3	10.35	95	95386	9.38	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	93.80%

Target Compounds

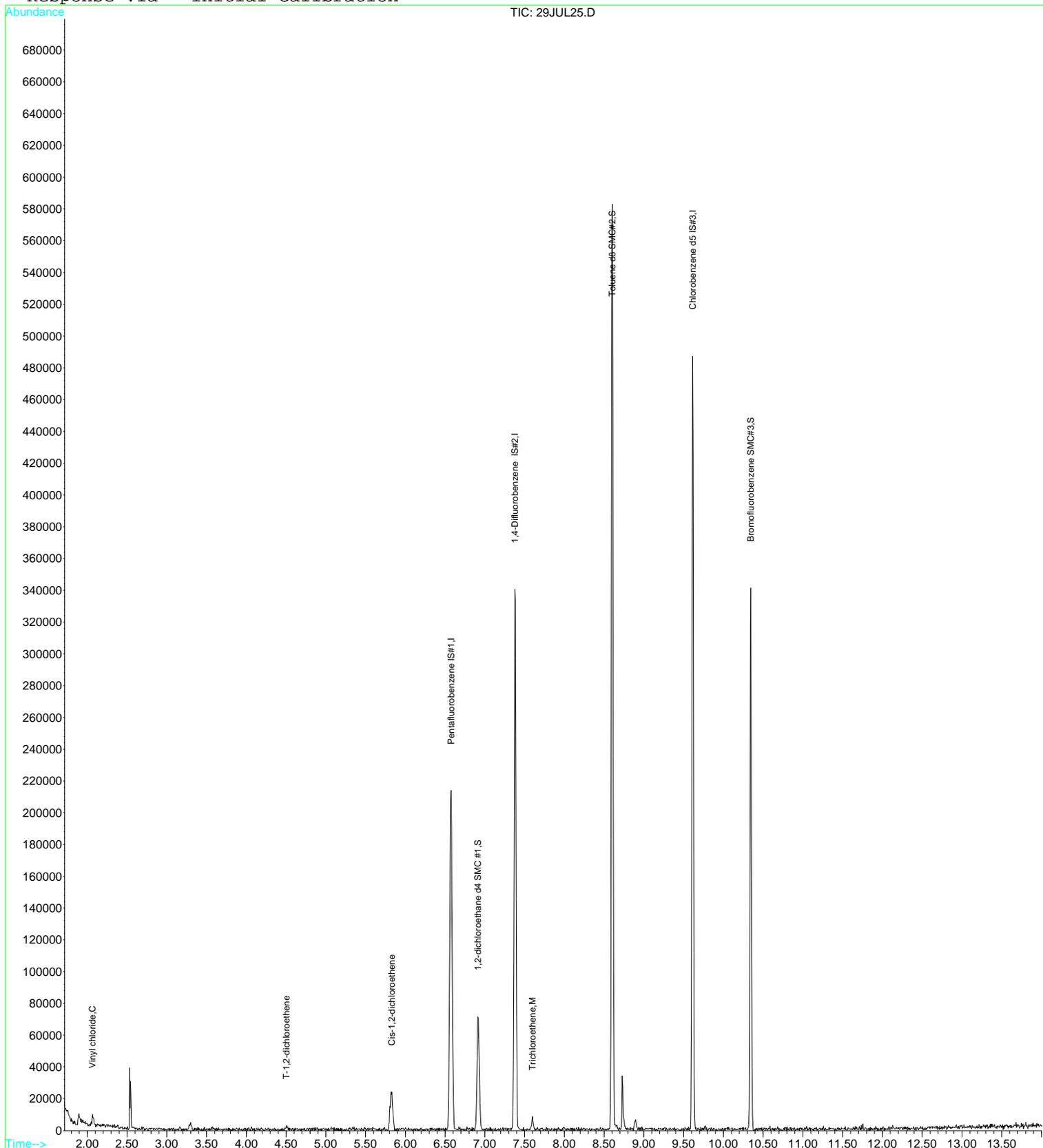
	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	6371	0.49	ug/L #	70
12) T-1,2-dichloroethene	4.50	96	827	0.10	ug/L #	1
15) Cis-1,2-dichloroethene	5.83	96	13184	1.46	ug/L	88
25) Trichloroethene	7.60	130	2477	0.28	ug/L #	83

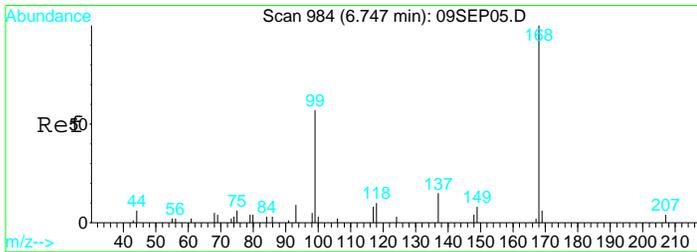
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL25.D
Acq On : 29 Jul 2017 11:44 pm
Sample : 1720405-17
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:35 2017

Vial: 25
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

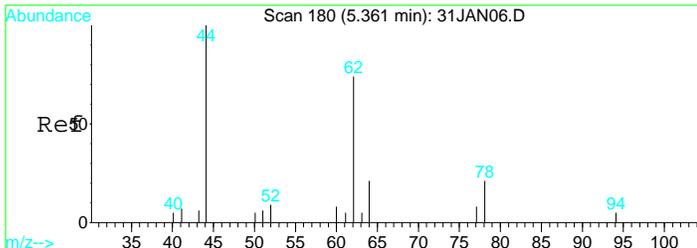
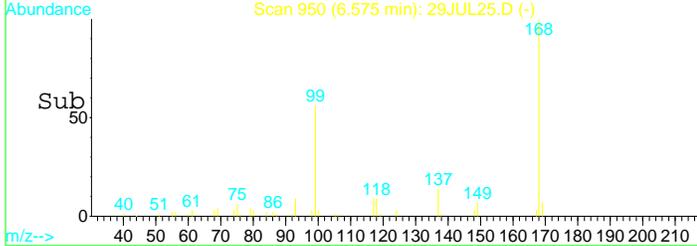
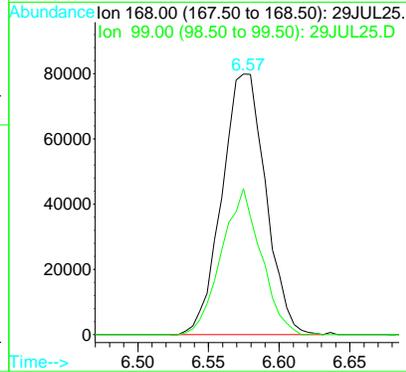
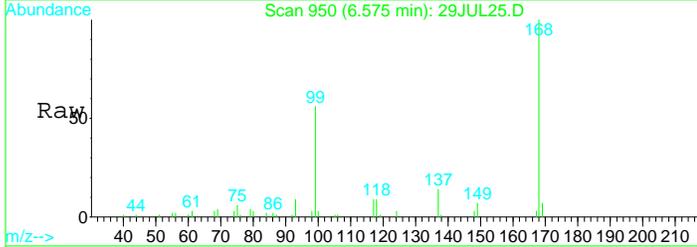
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





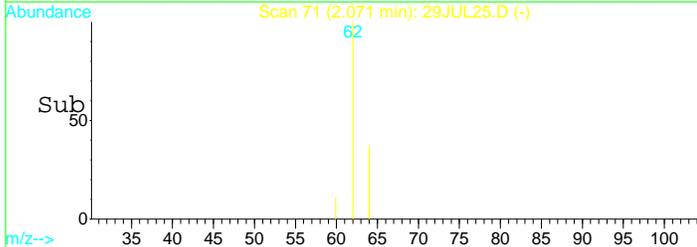
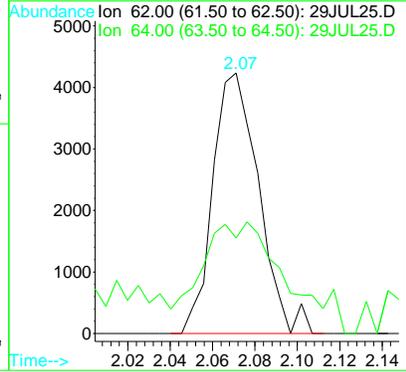
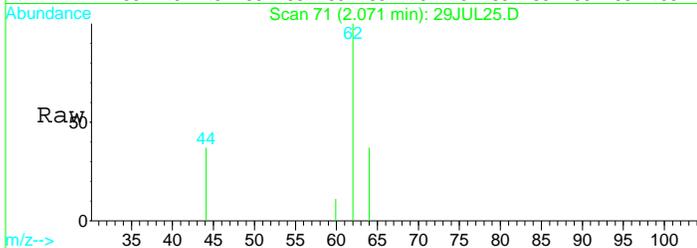
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL25.D
 Acq: 29 Jul 2017 11:44 pm

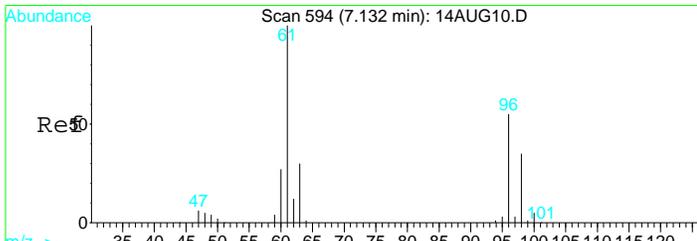
Tgt Ion	Resp	Lower	Upper
168	100		
99	50.4	38.7	71.9



#4
 Vinyl chloride
 Concen: 0.49 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL25.D
 Acq: 29 Jul 2017 11:44 pm

Tgt Ion	Resp	Lower	Upper
62	100		
64	78.1	39.3	72.9#

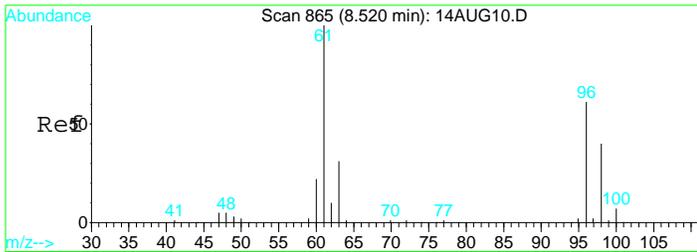
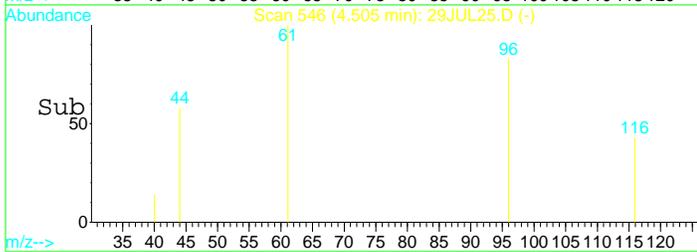
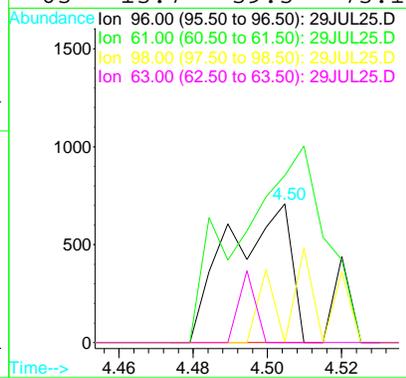
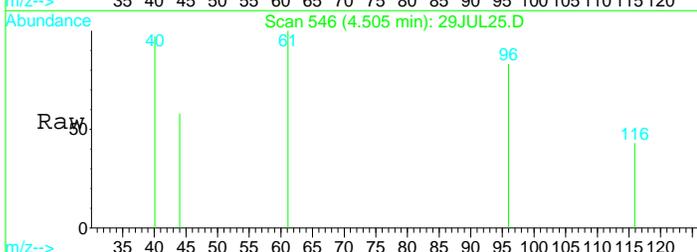




#12
 T-1,2-dichloroethene
 Concen: 0.10 ug/L
 RT: 4.50 min Scan# 546
 Delta R.T. 0.00 min
 Lab File: 29JUL25.D
 Acq: 29 Jul 2017 11:44 pm

Tgt Ion: 96 Resp: 827

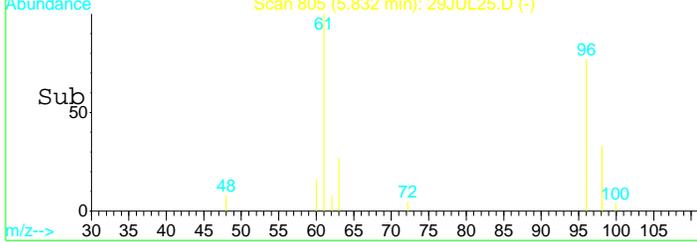
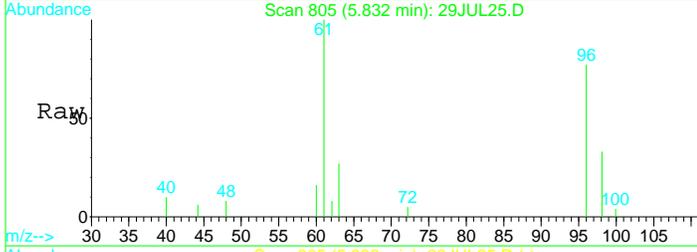
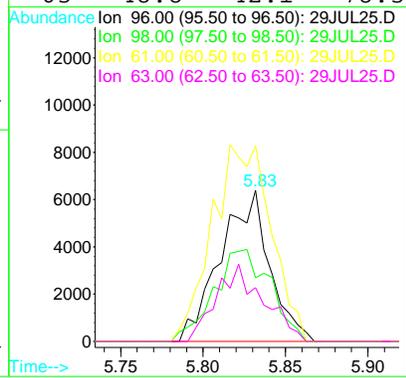
Ion	Ratio	Lower	Upper
96	100		
61	0.0	129.4	240.4#
98	13.9	41.5	77.1#
63	13.7	39.3	73.1#

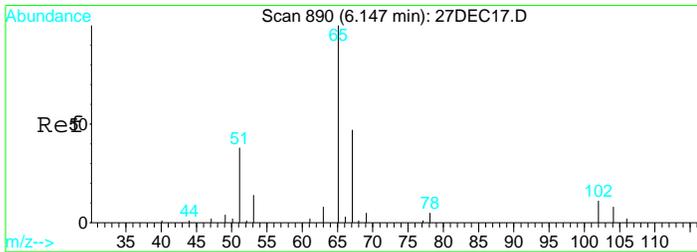


#15
 Cis-1,2-dichloroethene
 Concen: 1.46 ug/L
 RT: 5.83 min Scan# 805
 Delta R.T. 0.01 min
 Lab File: 29JUL25.D
 Acq: 29 Jul 2017 11:44 pm

Tgt Ion: 96 Resp: 13184

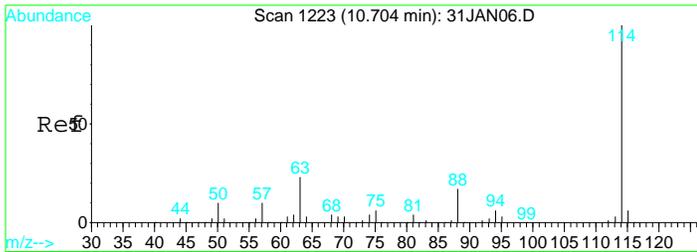
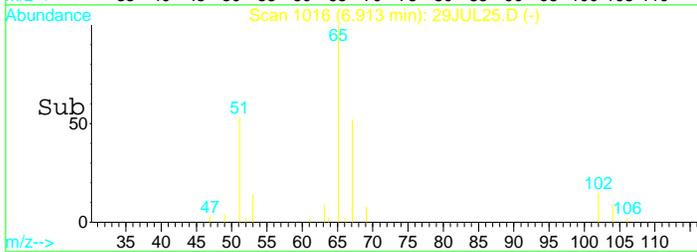
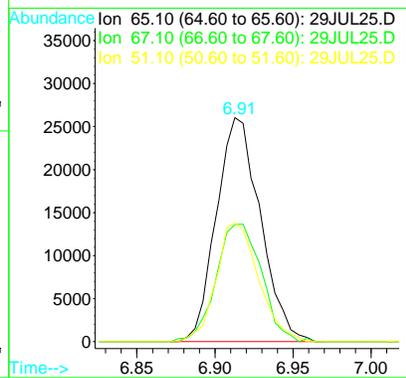
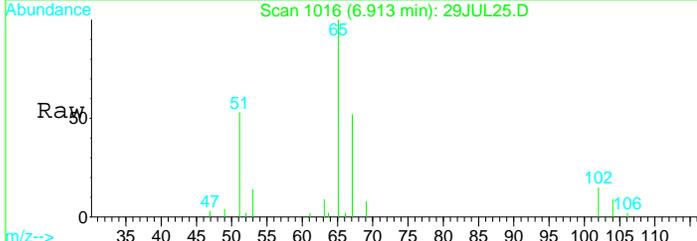
Ion	Ratio	Lower	Upper
96	100		
98	69.6	51.9	96.3
61	156.1	122.8	228.0
63	48.8	42.1	78.3





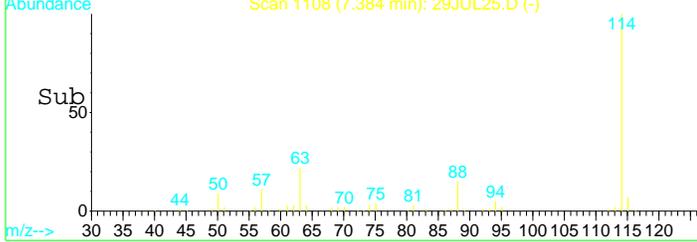
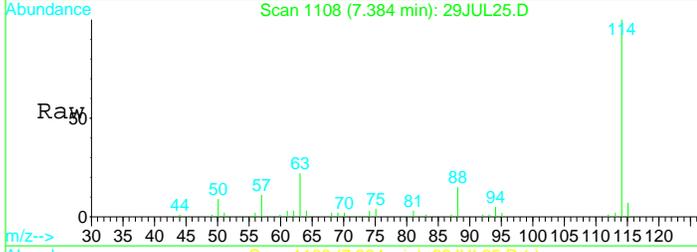
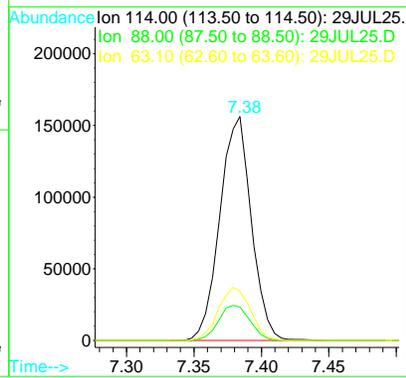
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 29JUL25.D
 Acq: 29 Jul 2017 11:44 pm

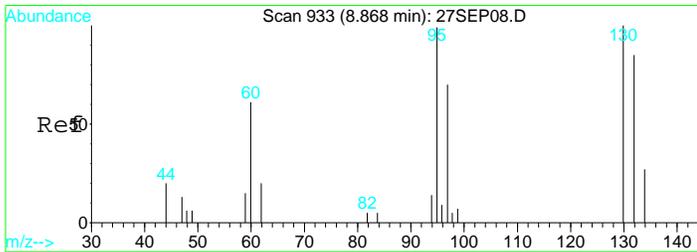
Tgt Ion	Resp	Lower	Upper
65	100		
67	54.0	36.2	67.2
51	51.0	42.0	78.0



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. 0.00 min
 Lab File: 29JUL25.D
 Acq: 29 Jul 2017 11:44 pm

Tgt Ion	Resp	Lower	Upper
114	100		
88	15.7	11.7	21.7
63	24.1	16.7	30.9

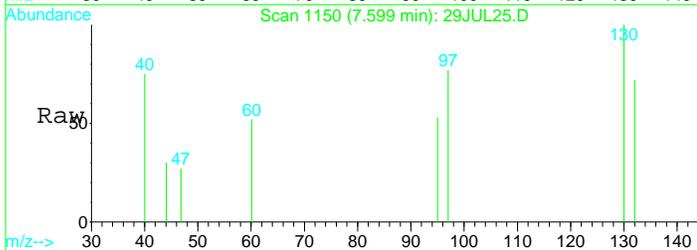




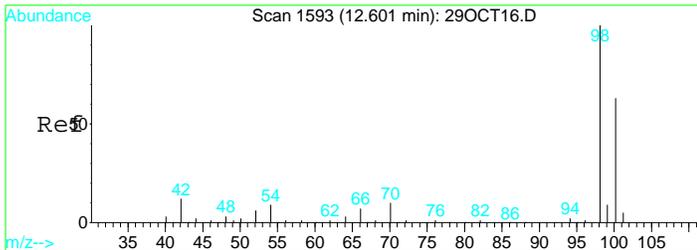
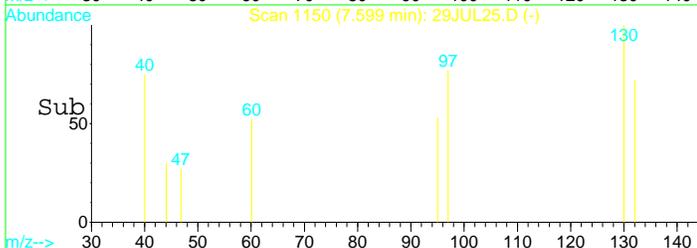
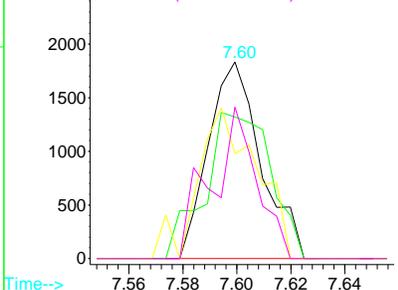
#25
 Trichloroethene
 Concen: 0.28 ug/L
 RT: 7.60 min Scan# 1150
 Delta R.T. 0.00 min
 Lab File: 29JUL25.D
 Acq: 29 Jul 2017 11:44 pm

Tgt Ion: 130 Resp: 2477

Ion	Ratio	Lower	Upper
130	100		
132	93.5	66.1	122.7
95	86.1	86.1	159.9#
97	66.5	52.8	98.0



Abundance Ion 129.90 (129.40 to 130.40): 29JUL25.D
 Ion 131.90 (131.40 to 132.40): 29JUL25.D
 Ion 95.00 (94.50 to 95.50): 29JUL25.D
 Ion 97.00 (96.50 to 97.50): 29JUL25.D

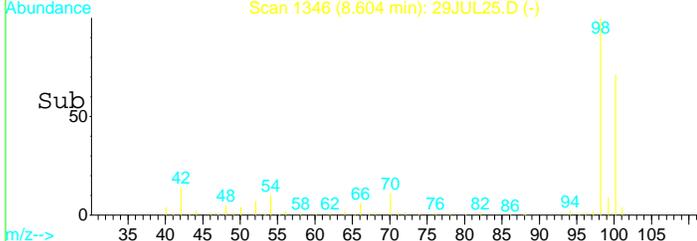
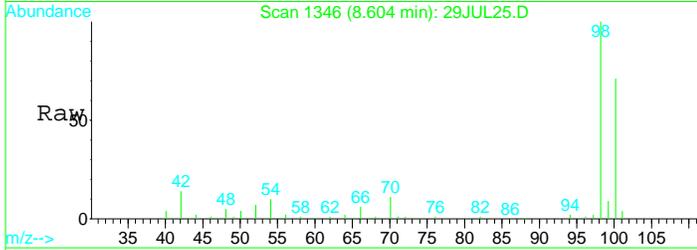
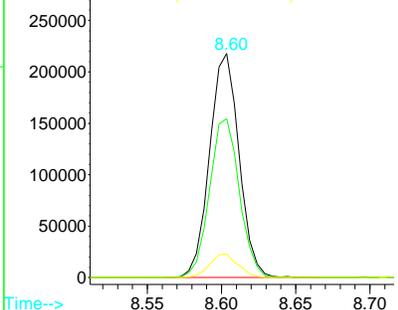


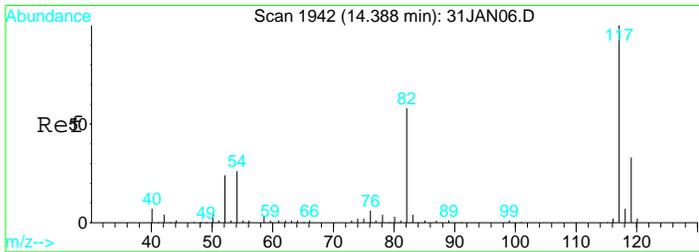
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL25.D
 Acq: 29 Jul 2017 11:44 pm

Tgt Ion: 98 Resp: 301438

Ion	Ratio	Lower	Upper
98	100		
100	71.7	49.7	92.3
70	10.2	7.3	13.7

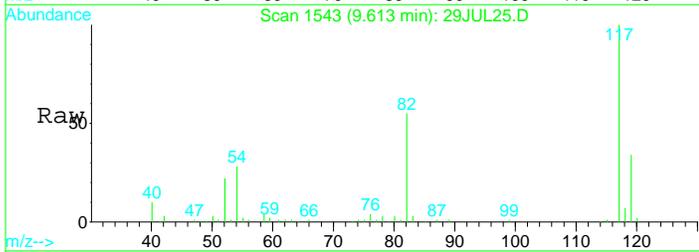
Abundance Ion 98.10 (97.60 to 98.60): 29JUL25.D
 Ion 100.10 (99.60 to 100.60): 29JUL25.D
 Ion 70.10 (69.60 to 70.60): 29JUL25.D



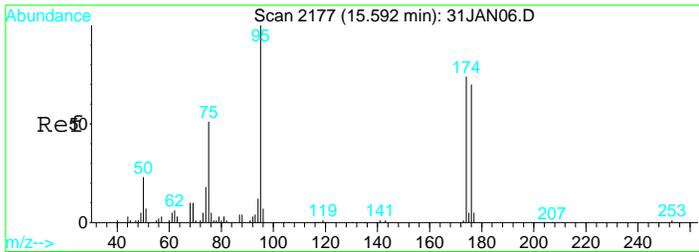
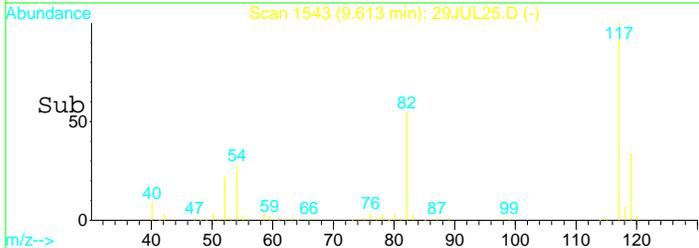
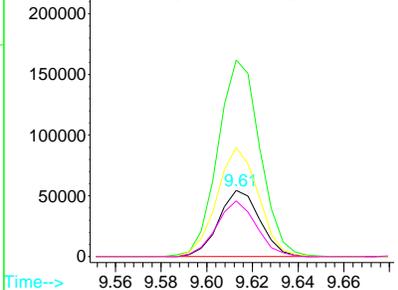


#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 29JUL25.D
 Acq: 29 Jul 2017 11:44 pm

Tgt Ion	Resp	Lower	Upper
119	68091		
119	100		
117	304.4	214.5	398.4
82	166.2	117.7	218.7
54	81.6	55.2	102.4

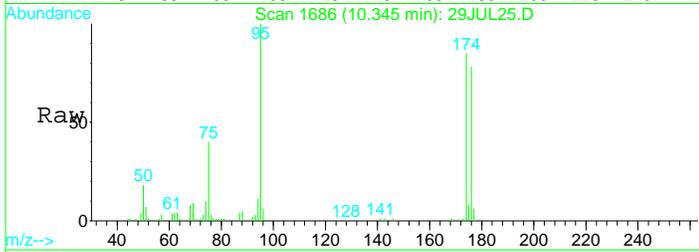


Abundance Ion 119.00 (118.50 to 119.50): 29JUL25.D
 250000 Ion 117.00 (116.50 to 117.50): 29JUL25.D
 Ion 82.10 (81.60 to 82.60): 29JUL25.D
 Ion 54.10 (53.60 to 54.60): 29JUL25.D

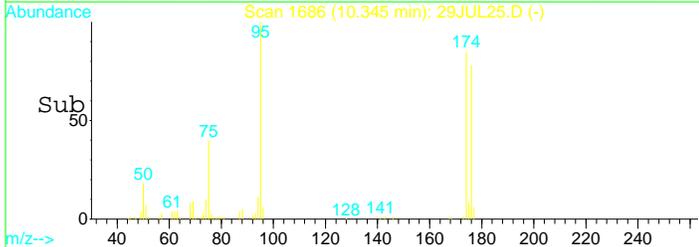
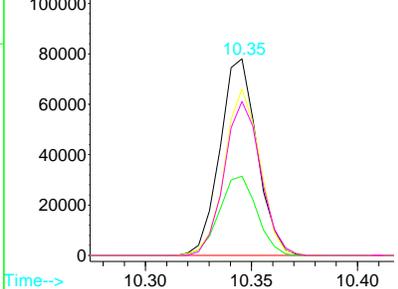


#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.35 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL25.D
 Acq: 29 Jul 2017 11:44 pm

Tgt Ion	Resp	Lower	Upper
95	95386		
95	100		
75	40.8	29.5	54.7
174	80.6	52.3	97.1
176	76.6	49.6	92.2



Abundance Ion 95.00 (94.50 to 95.50): 29JUL25.D
 120000 Ion 75.00 (74.50 to 75.50): 29JUL25.D
 Ion 173.90 (173.40 to 174.40): 29JUL25.D
 Ion 175.90 (175.40 to 176.40): 29JUL25.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL25.D Vial: 25
 Acq On : 29 Jul 2017 11:44 pm Operator: MGC
 Sample : 1720405-17 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:49 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172400	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	254000	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	68091	10.00	ug/L	0.00

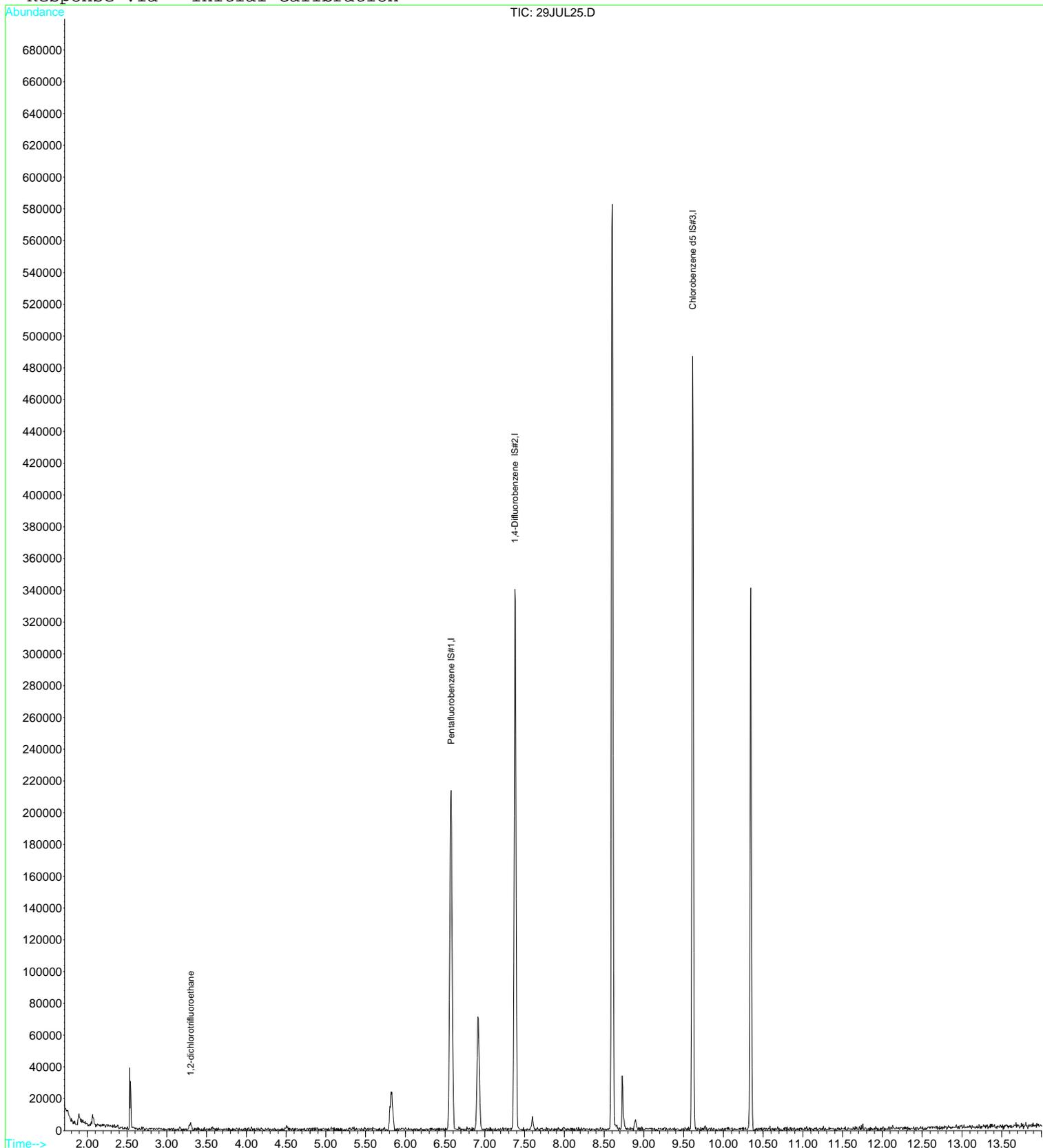
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) 1,2-dichlorotrifluoroethan	3.30	67	2679	0.24	ug/L	# 71

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL25.D
Acq On : 29 Jul 2017 11:44 pm
Sample : 1720405-17
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:49 2017

Vial: 25
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL26.D Vial: 26
 Acq On : 30 Jul 2017 12:07 am Operator: MGC
 Sample : 1720405-18 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 30 5:35 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	174139	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	257556	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	68275	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	51664	10.16	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	101.60%
31) Toluene d8 SMC#2	8.60	98	303859	9.55	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	95.50%
49) Bromofluorobenzene SMC#3	10.35	95	97692	9.58	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	95.80%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
4) Vinyl chloride	2.07	62	3302	0.25	ug/L #	76
12) T-1,2-dichloroethene	4.51	96	3944	0.45	ug/L	92
15) Cis-1,2-dichloroethene	5.82	96	68307	7.51	ug/L	89
25) Trichloroethene	7.60	130	3717	0.42	ug/L	90
63) 1,2-Dichlorobenzene	11.24	146	4130	0.28	ug/L #	88

(#) = qualifier out of range (m) = manual integration

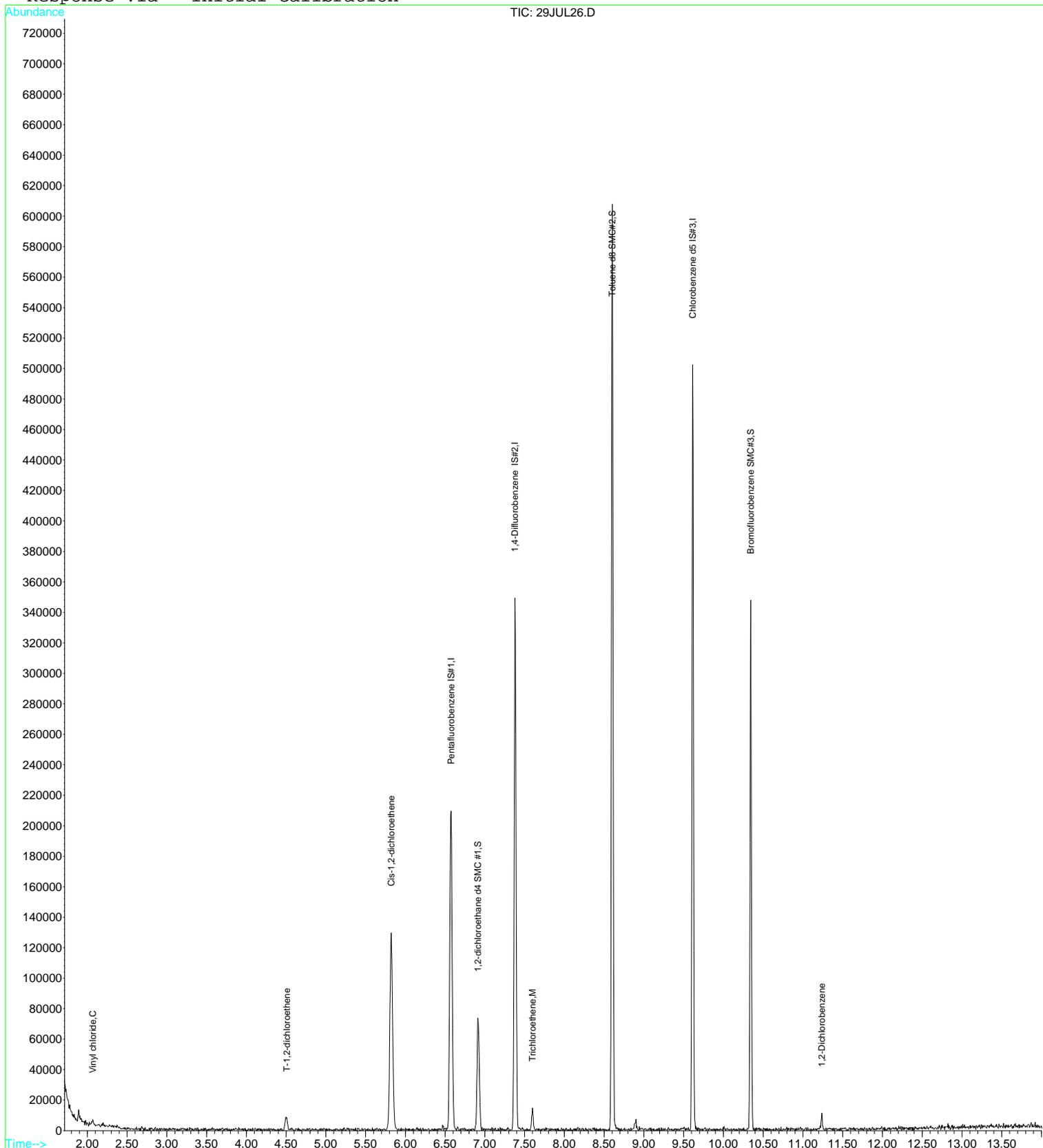
29JUL26.D 82605.M Sun Jul 30 05:41:03 2017

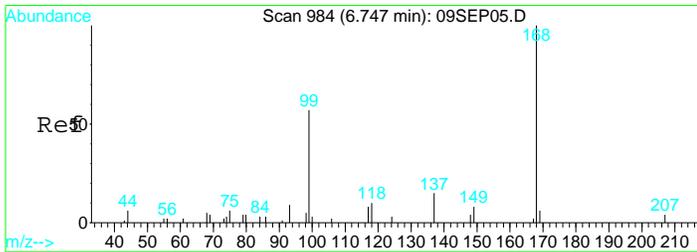
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL26.D
Acq On : 30 Jul 2017 12:07 am
Sample : 1720405-18
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:35 2017

Vial: 26
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

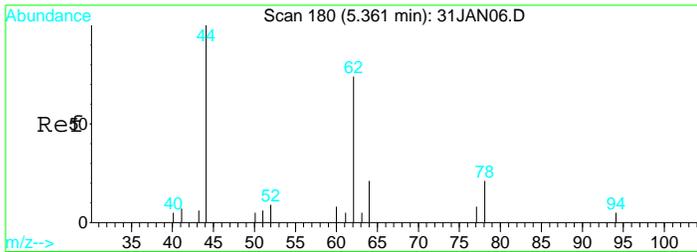
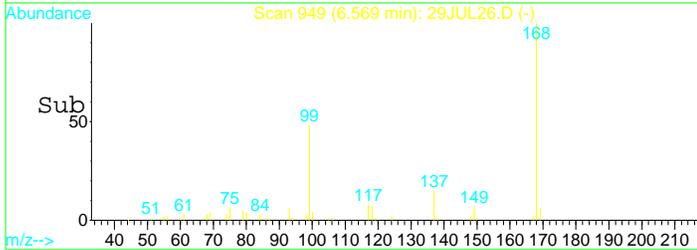
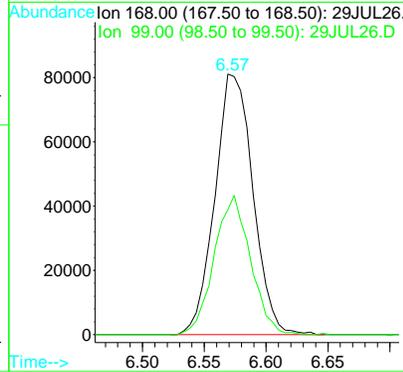
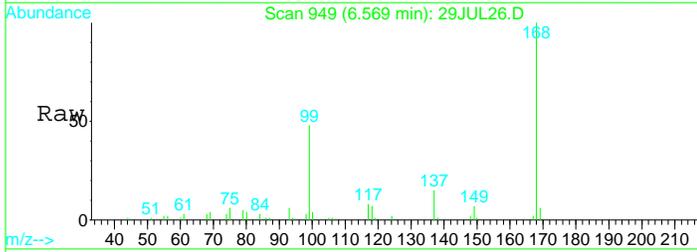
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





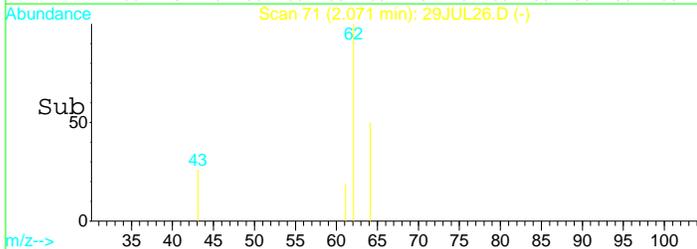
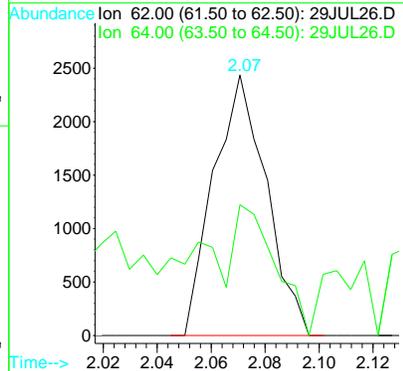
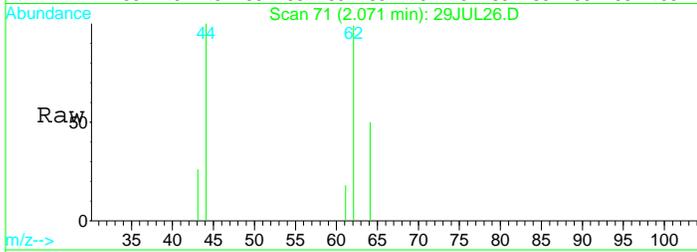
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 949
 Delta R.T. -0.01 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

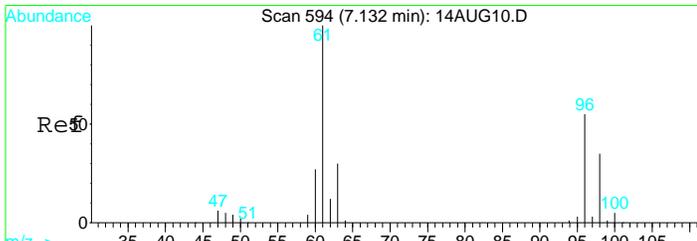
Tgt Ion: 168 Resp: 174139
 Ion Ratio Lower Upper
 168 100
 99 50.6 38.7 71.9



#4
 Vinyl chloride
 Concen: 0.25 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

Tgt Ion: 62 Resp: 3302
 Ion Ratio Lower Upper
 62 100
 64 38.7 39.3 72.9#

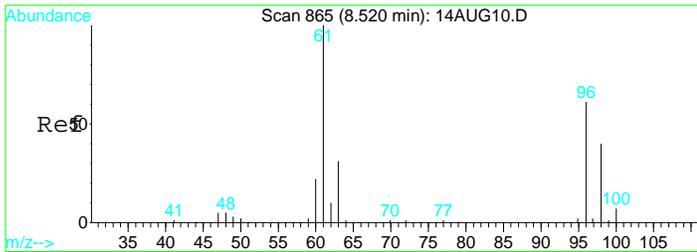
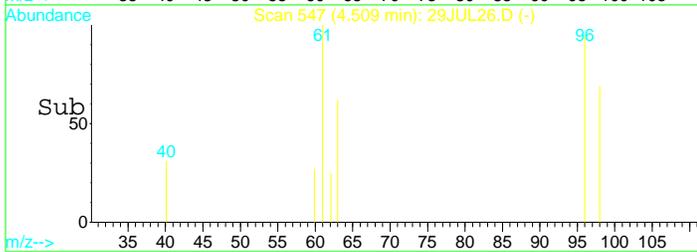
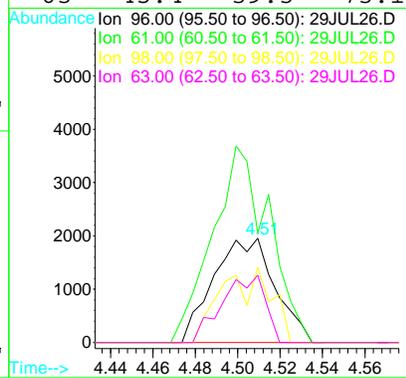
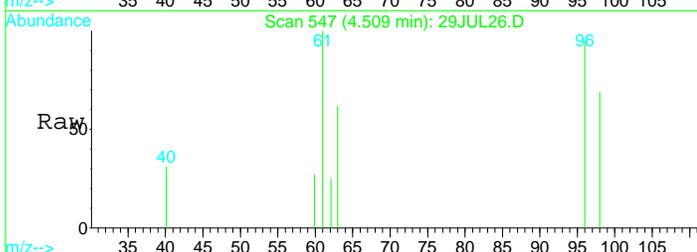




#12
 T-1,2-dichloroethene
 Concen: 0.45 ug/L
 RT: 4.51 min Scan# 547
 Delta R.T. 0.01 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

Tgt Ion: 96 Resp: 3944

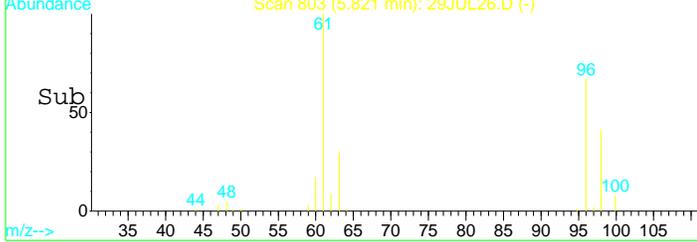
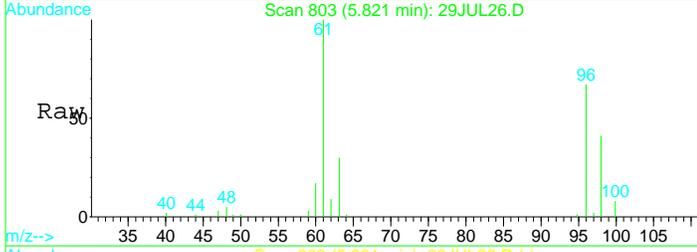
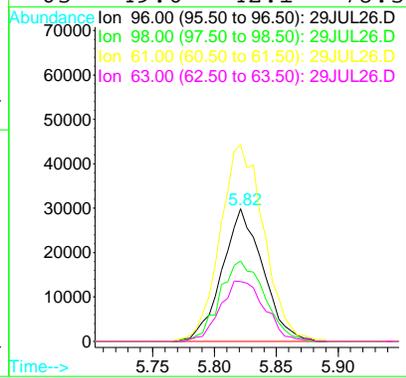
Ion	Ratio	Lower	Upper
96	100		
61	172.3	129.4	240.4
98	58.2	41.5	77.1
63	45.4	39.3	73.1

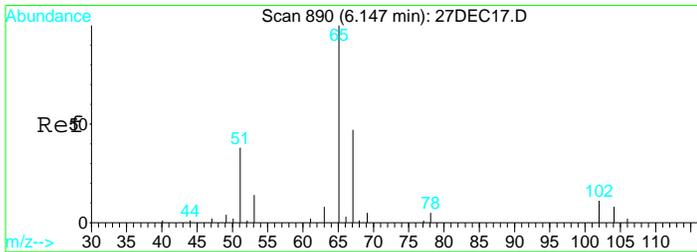


#15
 Cis-1,2-dichloroethene
 Concen: 7.51 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

Tgt Ion: 96 Resp: 68307

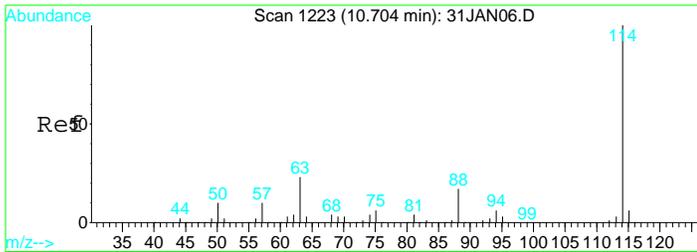
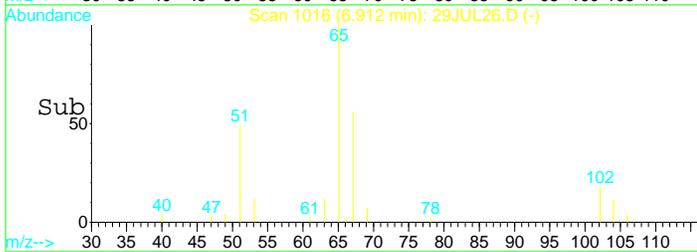
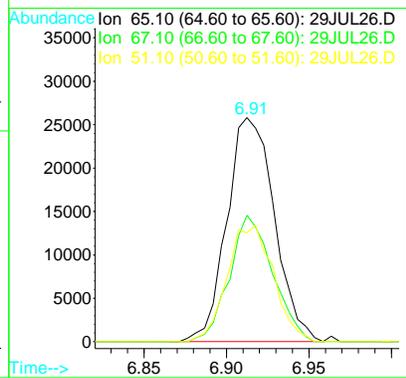
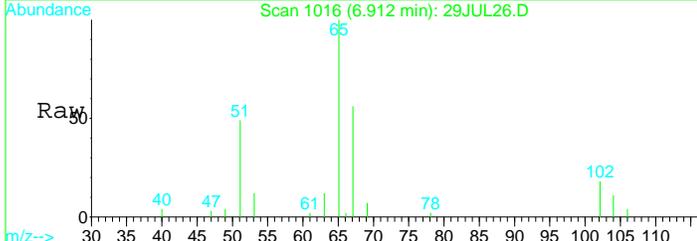
Ion	Ratio	Lower	Upper
96	100		
98	66.4	51.9	96.3
61	159.3	122.8	228.0
63	49.6	42.1	78.3





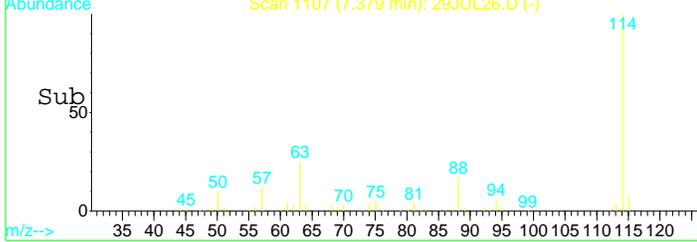
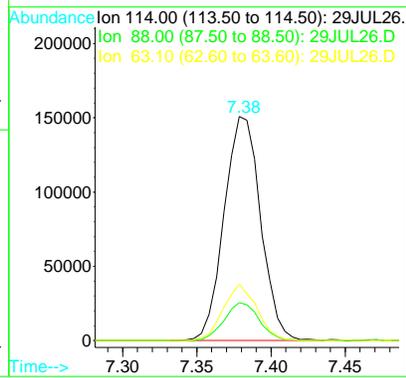
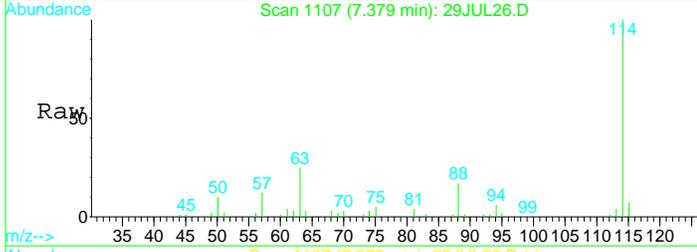
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

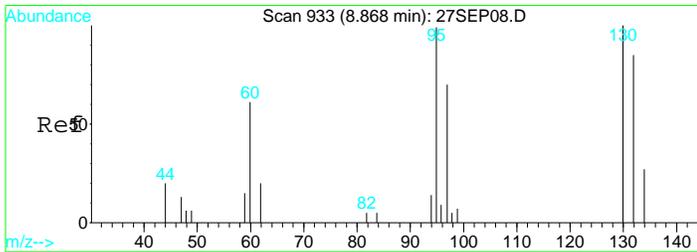
Tgt Ion	Resp	Lower	Upper
65	100		
67	51.4	36.2	67.2
51	50.4	42.0	78.0



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

Tgt Ion	Resp	Lower	Upper
114	100		
88	16.1	11.7	21.7
63	23.1	16.7	30.9

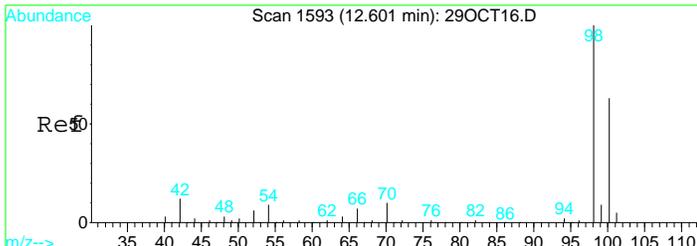
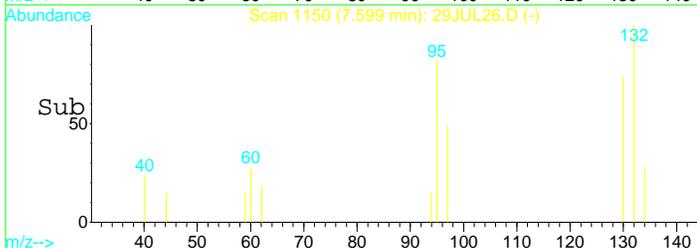
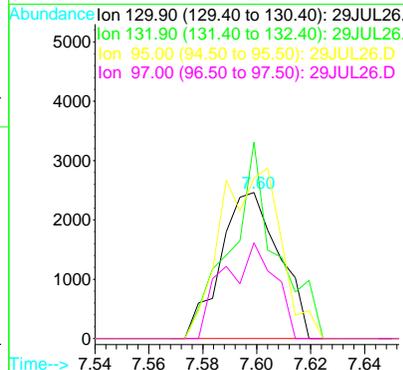
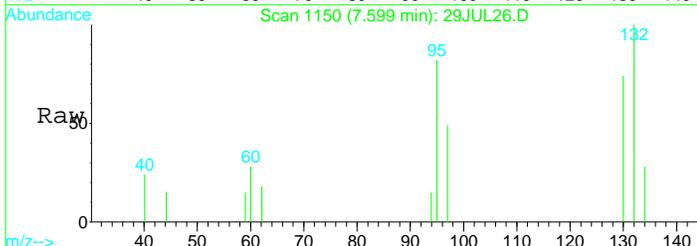




#25
 Trichloroethene
 Concen: 0.42 ug/L
 RT: 7.60 min Scan# 1150
 Delta R.T. 0.00 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

Tgt Ion: 130 Resp: 3717

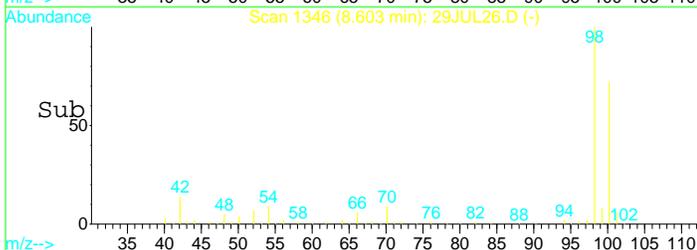
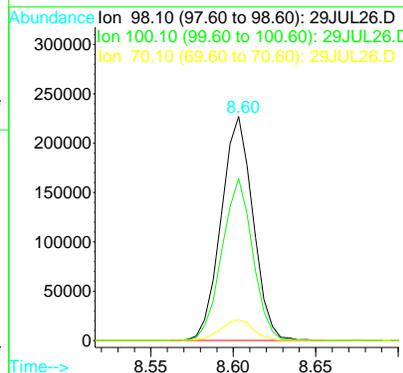
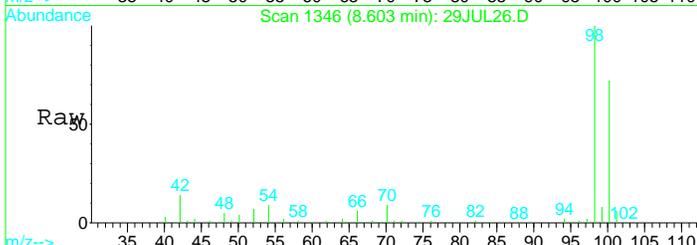
Ion	Ratio	Lower	Upper
130	100		
132	104.7	66.1	122.7
95	120.1	86.1	159.9
97	56.7	52.8	98.0

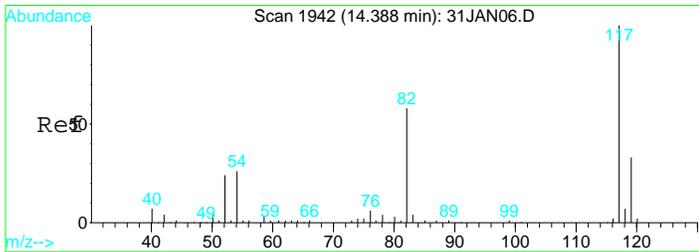


#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

Tgt Ion: 98 Resp: 303859

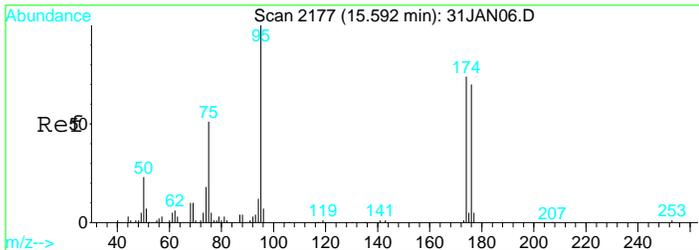
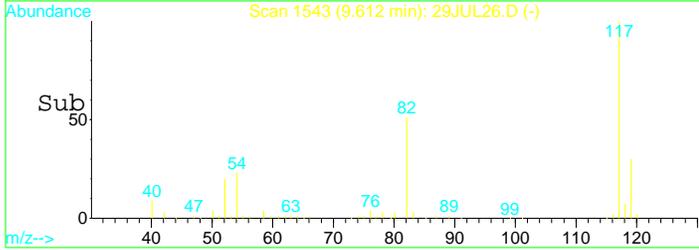
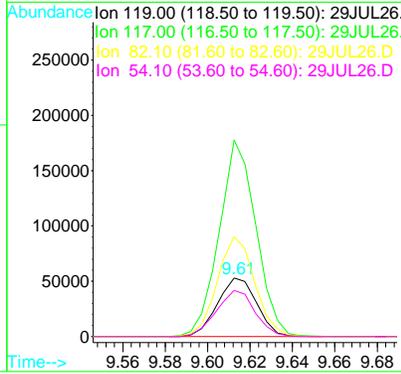
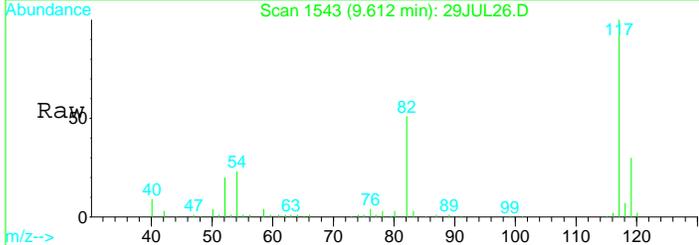
Ion	Ratio	Lower	Upper
98	100		
100	70.0	49.7	92.3
70	9.6	7.3	13.7





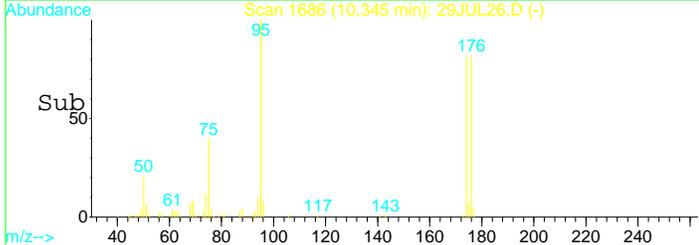
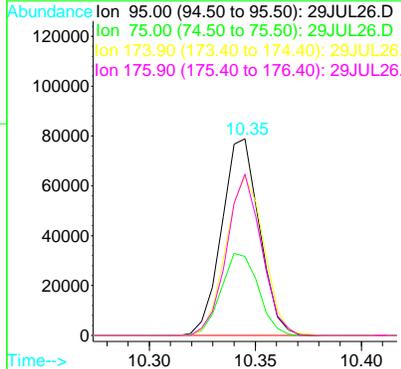
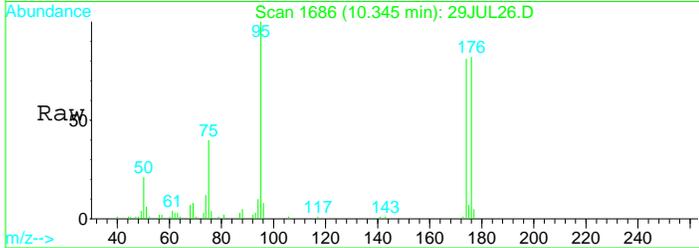
#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

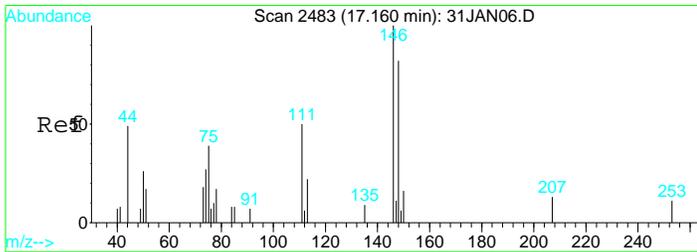
Tgt Ion	Resp	Lower	Upper
119	68275		
117	314.9	214.5	398.4
82	162.5	117.7	218.7
54	77.7	55.2	102.4



#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.35 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

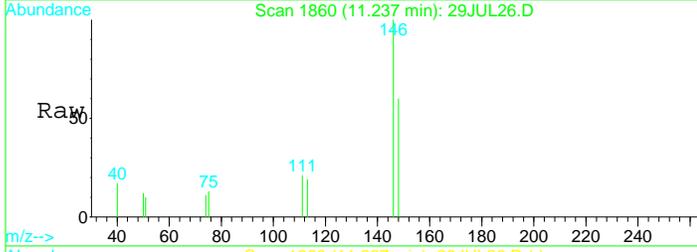
Tgt Ion	Resp	Lower	Upper
95	97692		
95	100		
75	41.2	29.5	54.7
174	81.3	52.3	97.1
176	75.6	49.6	92.2



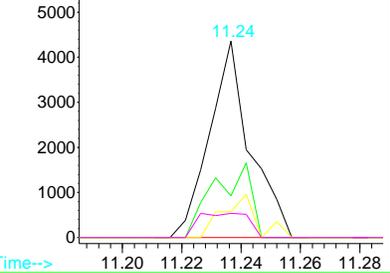
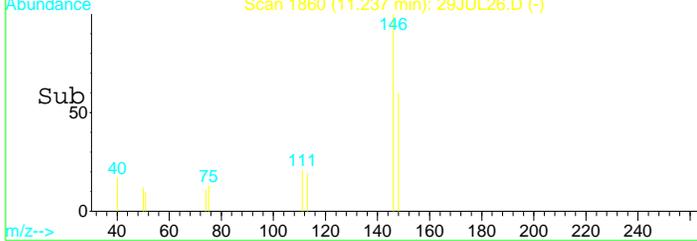


#63
 1,2-Dichlorobenzene
 Concen: 0.28 ug/L
 RT: 11.24 min Scan# 1860
 Delta R.T. -0.00 min
 Lab File: 29JUL26.D
 Acq: 30 Jul 2017 12:07 am

Tgt Ion	Resp	Lower	Upper
146	100		
111	34.9	28.8	53.6
75	18.3	19.8	36.8#
50	15.4	9.7	17.9



Abundance Ion 146.00 (145.50 to 146.50): 29JUL26.D
 Ion 111.00 (110.50 to 111.50): 29JUL26.D
 Ion 75.00 (74.50 to 75.50): 29JUL26.D
 Ion 50.10 (49.60 to 50.60): 29JUL26.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL26.D Vial: 26
 Acq On : 30 Jul 2017 12:07 am Operator: MGC
 Sample : 1720405-18 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:49 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	174139	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	257556	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	68275	10.00	ug/L	0.00

Target Compounds Qvalue

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL26.D
Acq On : 30 Jul 2017 12:07 am
Sample : 1720405-18
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:49 2017

Vial: 26
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL27.D
 Acq On : 30 Jul 2017 12:30 am
 Sample : 1720405-19
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:36 2017

Vial: 27
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	170269	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	252756	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	69241	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	52464	10.55	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	105.50%
31) Toluene d8 SMC#2	8.60	98	308246	9.88	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.80%
49) Bromofluorobenzene SMC#3	10.34	95	95841	9.27	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	92.70%

Target Compounds

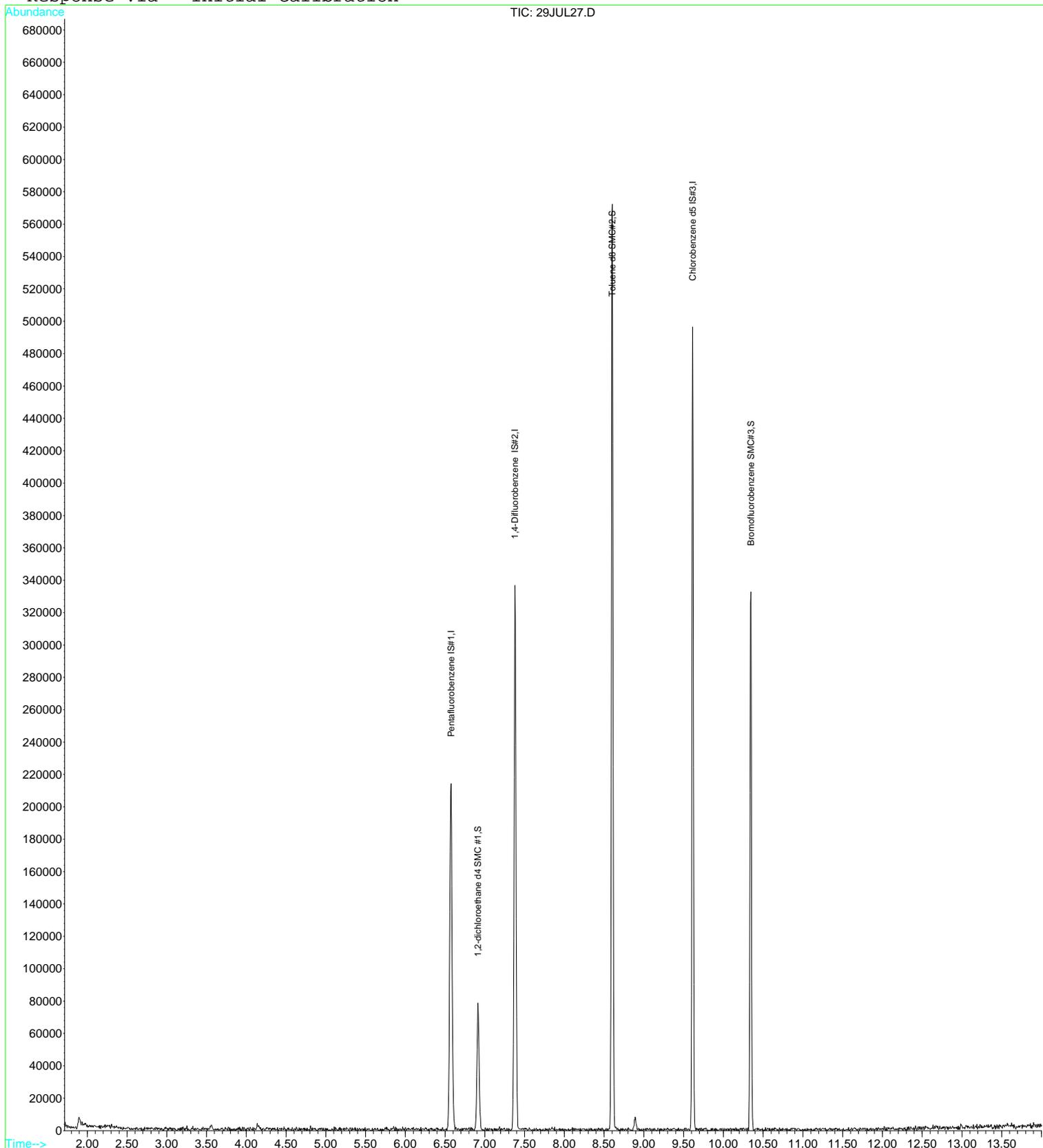
Qvalue

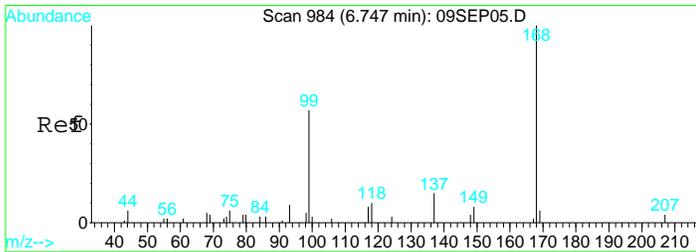
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL27.D
Acq On : 30 Jul 2017 12:30 am
Sample : 1720405-19
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:36 2017

Vial: 27
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

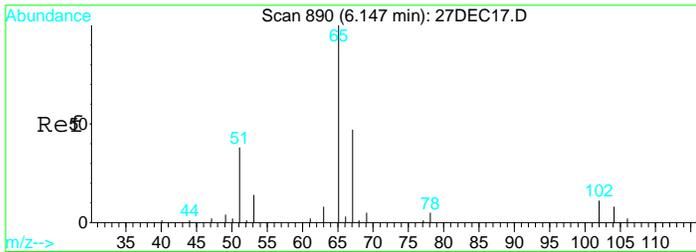
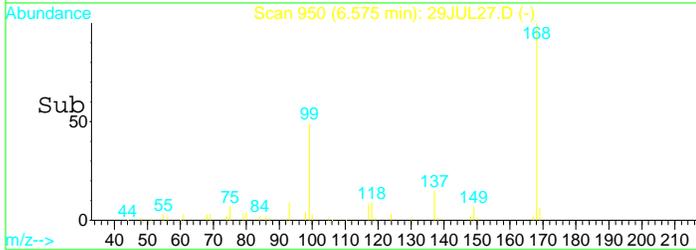
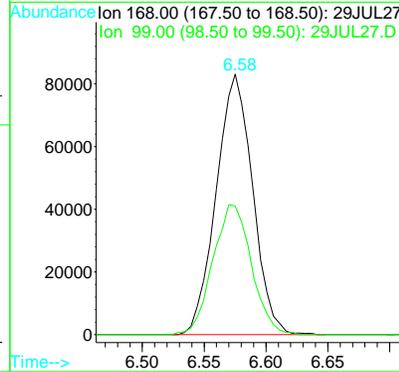
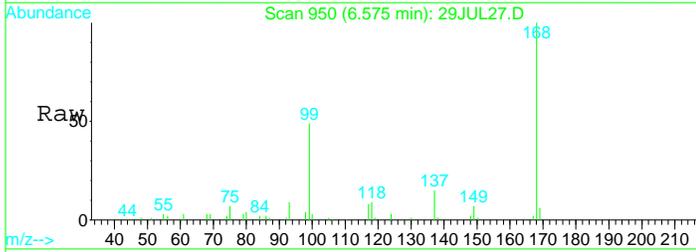
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





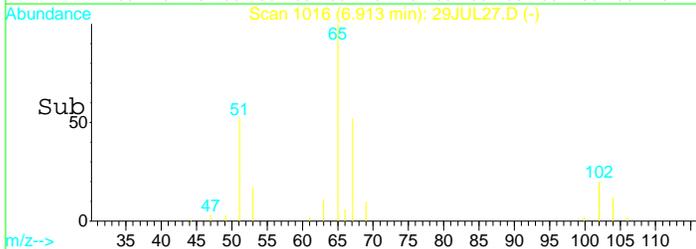
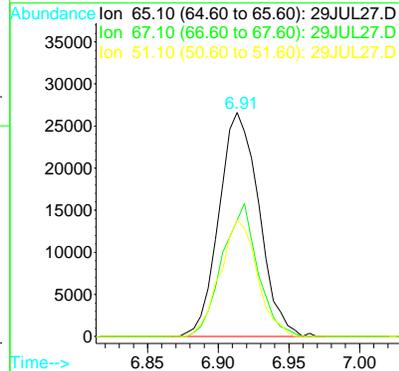
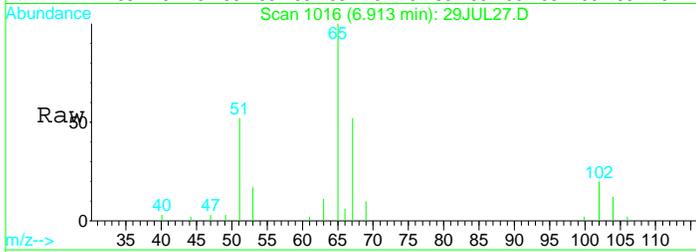
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.58 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL27.D
 Acq: 30 Jul 2017 12:30 am

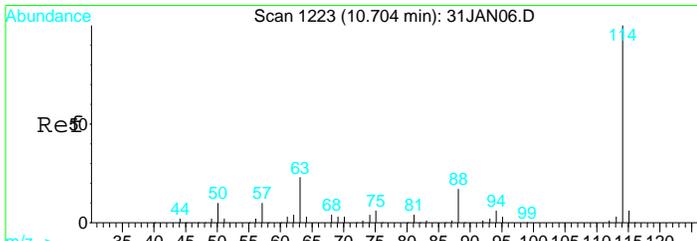
Tgt Ion: 168 Resp: 170269
 Ion Ratio Lower Upper
 168 100
 99 52.7 38.7 71.9



#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 29JUL27.D
 Acq: 30 Jul 2017 12:30 am

Tgt Ion: 65 Resp: 52464
 Ion Ratio Lower Upper
 65 100
 67 52.8 36.2 67.2
 51 48.4 42.0 78.0

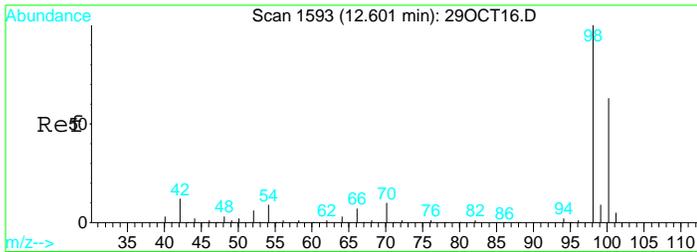
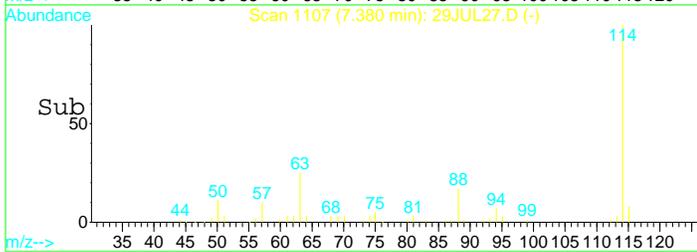
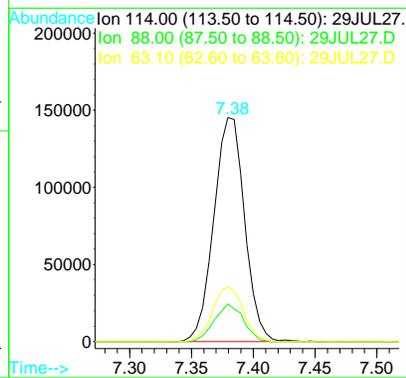
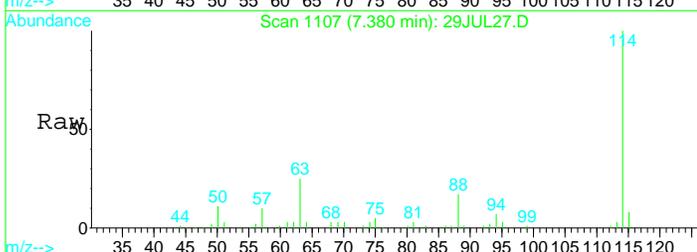




#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 29JUL27.D
 Acq: 30 Jul 2017 12:30 am

Tgt Ion: 114 Resp: 252756

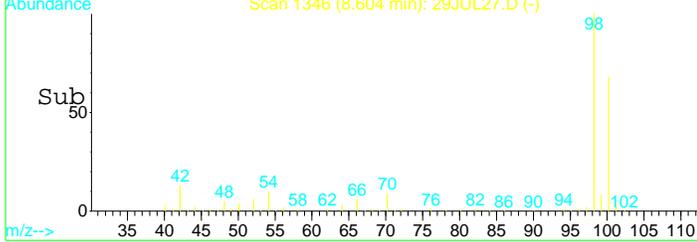
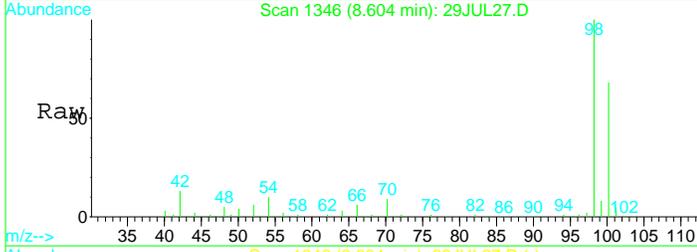
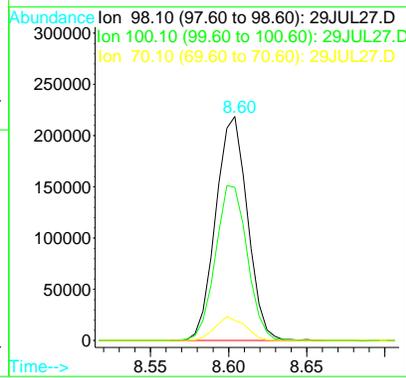
Ion	Ratio	Lower	Upper
114	100		
88	15.9	11.7	21.7
63	24.3	16.7	30.9

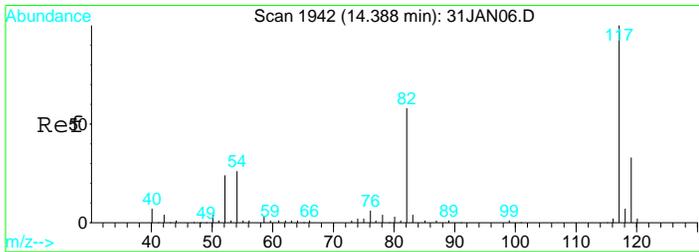


#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL27.D
 Acq: 30 Jul 2017 12:30 am

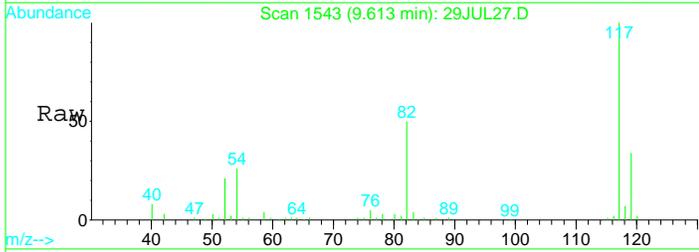
Tgt Ion: 98 Resp: 308246

Ion	Ratio	Lower	Upper
98	100		
100	69.2	49.7	92.3
70	10.1	7.3	13.7



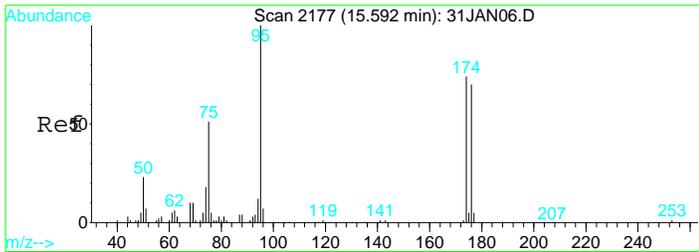
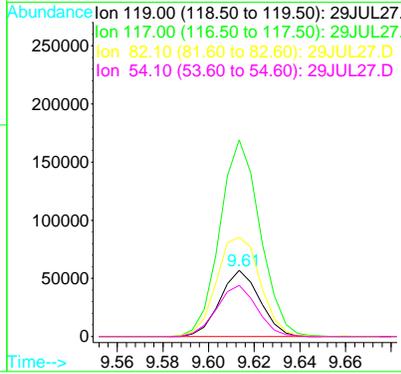
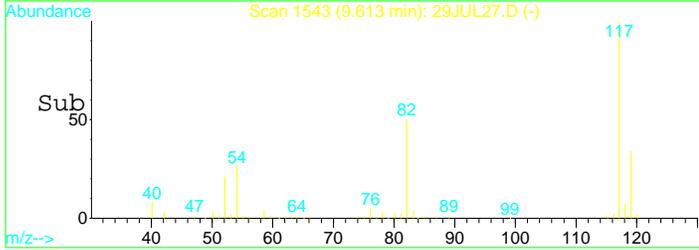


#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 29JUL27.D
 Acq: 30 Jul 2017 12:30 am

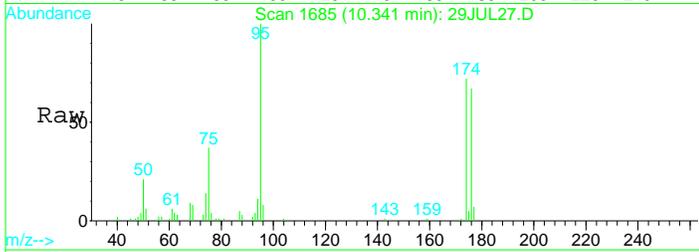


Tgt Ion: 119 Resp: 69241

Ion	Ratio	Lower	Upper
119	100		
117	300.4	214.5	398.4
82	164.4	117.7	218.7
54	78.1	55.2	102.4

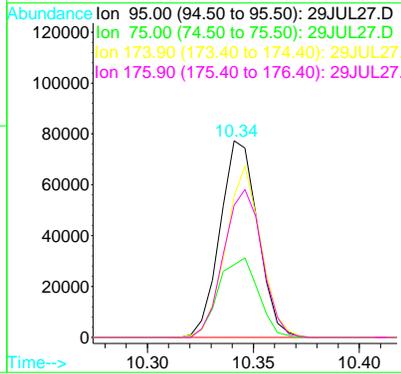
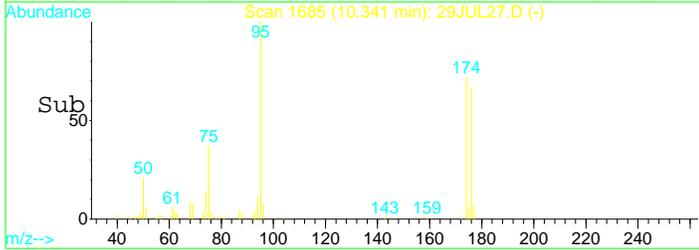


#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1685
 Delta R.T. -0.00 min
 Lab File: 29JUL27.D
 Acq: 30 Jul 2017 12:30 am



Tgt Ion: 95 Resp: 95841

Ion	Ratio	Lower	Upper
95	100		
75	42.6	29.5	54.7
174	81.5	52.3	97.1
176	76.4	49.6	92.2



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL27.D Vial: 27
 Acq On : 30 Jul 2017 12:30 am Operator: MGC
 Sample : 1720405-19 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:49 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	170269	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	252756	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	69241	10.00	ug/L	0.00

Target Compounds Qvalue

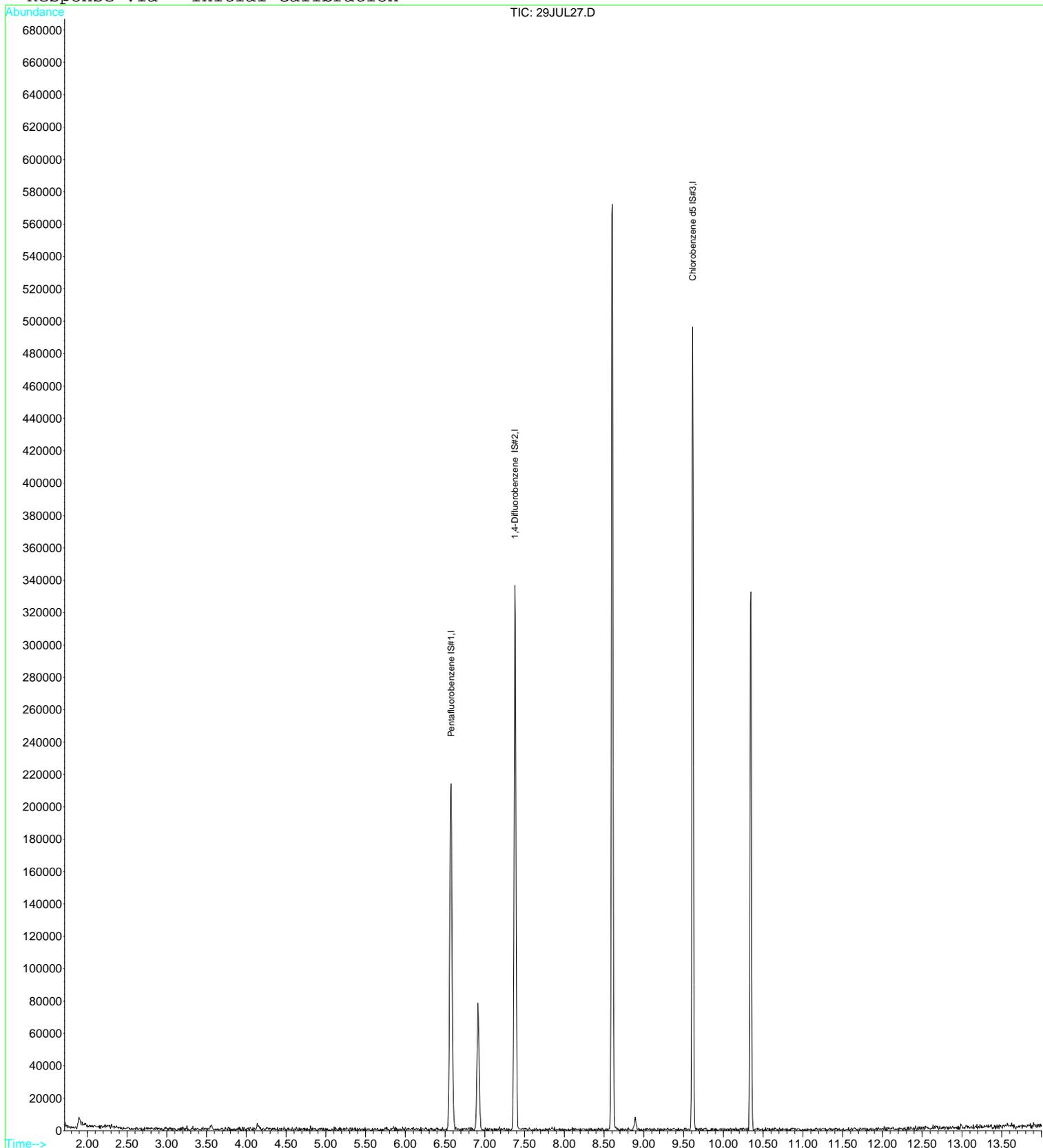
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL27.D
Acq On : 30 Jul 2017 12:30 am
Sample : 1720405-19
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:49 2017

Vial: 27
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL28.D
 Acq On : 30 Jul 2017 12:53 am
 Sample : 1720405-20
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:36 2017

Vial: 28
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	173969	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	254930	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	67498	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	53238	10.48	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	104.80%
31) Toluene d8 SMC#2	8.60	98	313039	9.94	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.40%
49) Bromofluorobenzene SMC#3	10.34	95	96425	9.57	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	95.70%

Target Compounds

Qvalue

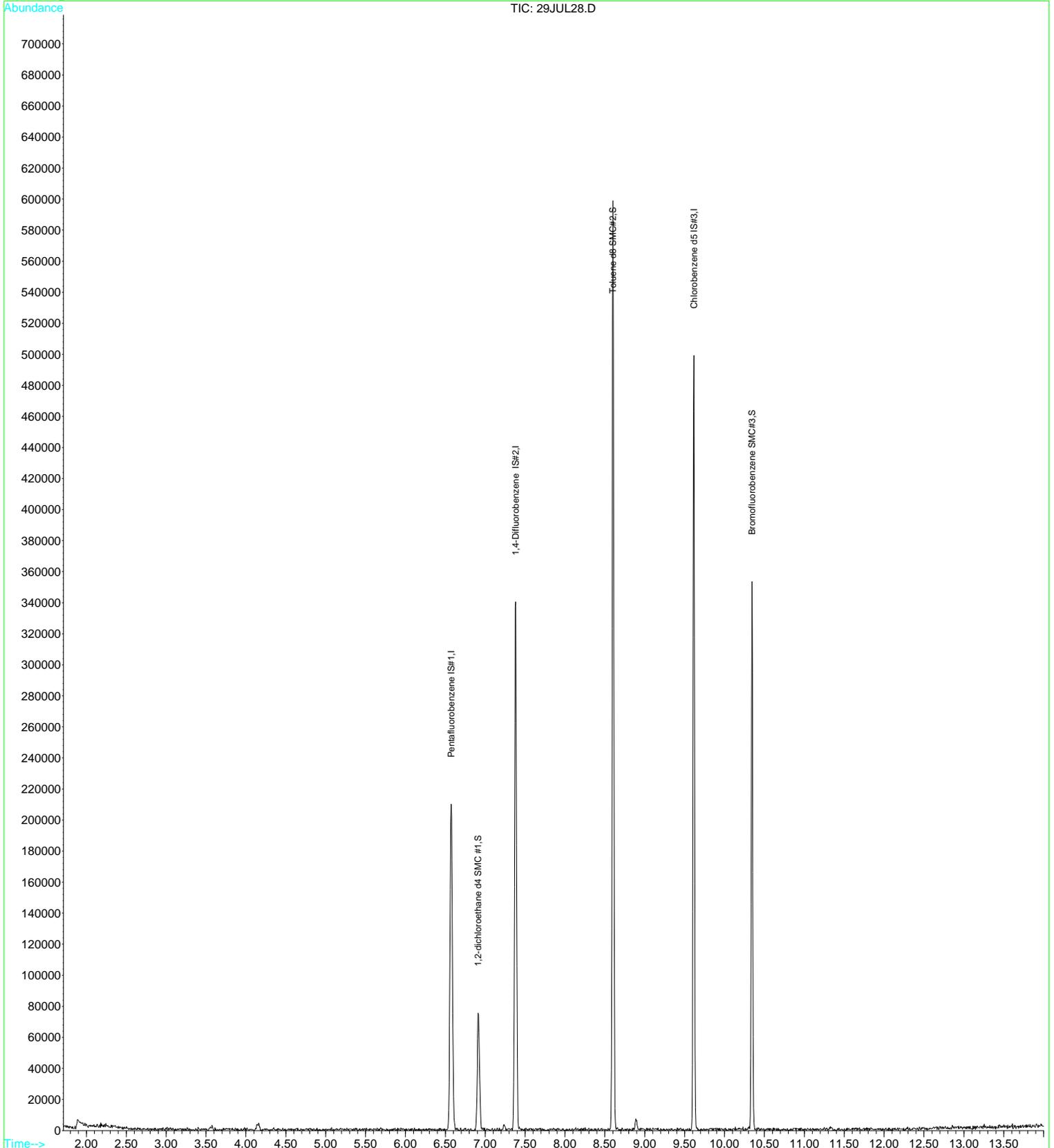
Quantitation Report

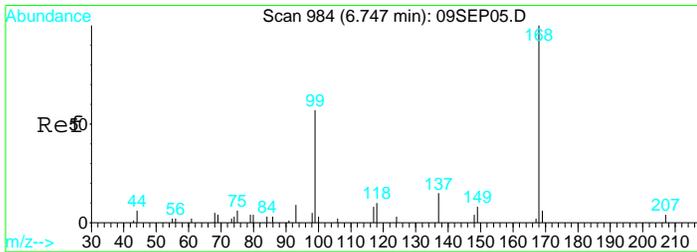
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL28.D
Acq On : 30 Jul 2017 12:53 am
Sample : 1720405-20
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:36 2017

Vial: 28
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

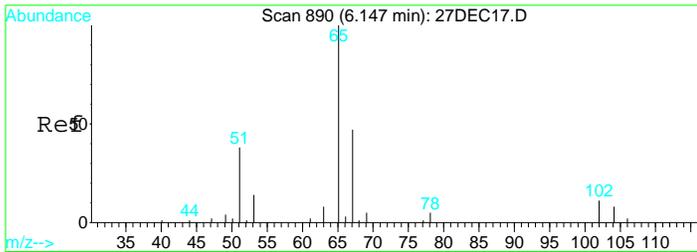
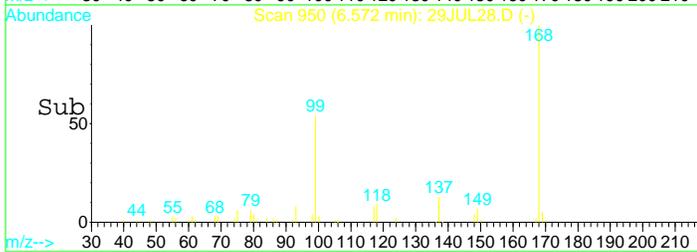
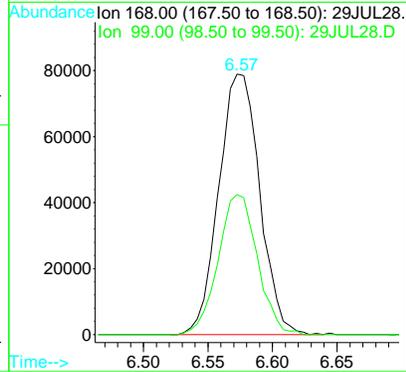
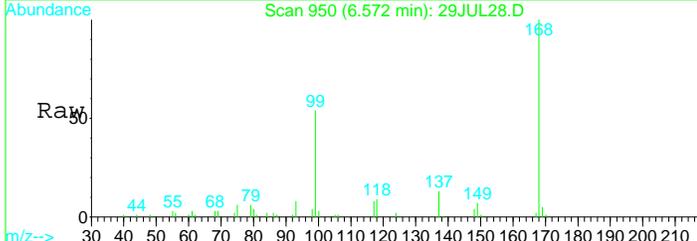
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





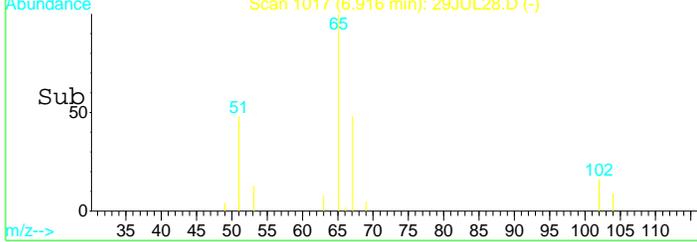
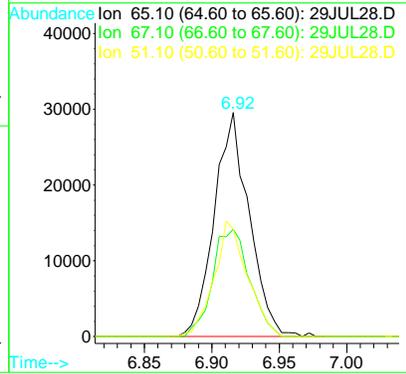
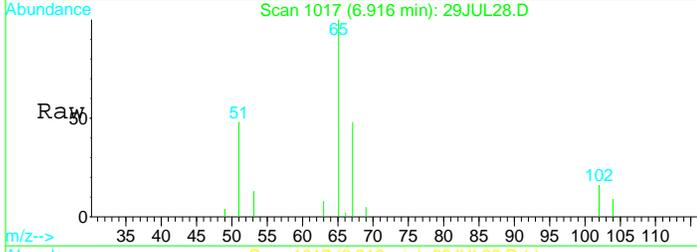
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL28.D
 Acq: 30 Jul 2017 12:53 am

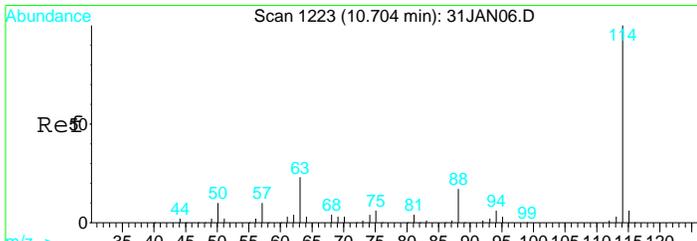
Tgt Ion	Resp	Lower	Upper
168	173969		
99	51.3	38.7	71.9



#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1017
 Delta R.T. 0.00 min
 Lab File: 29JUL28.D
 Acq: 30 Jul 2017 12:53 am

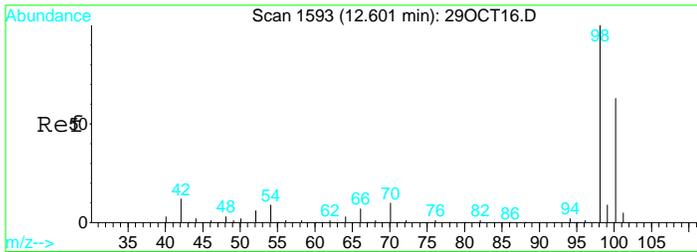
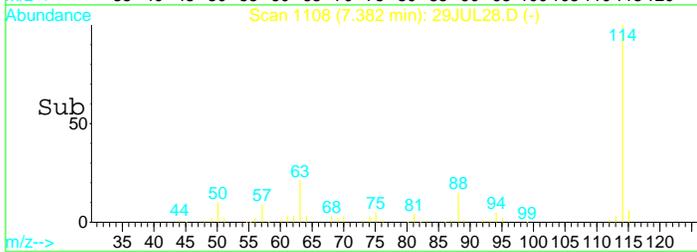
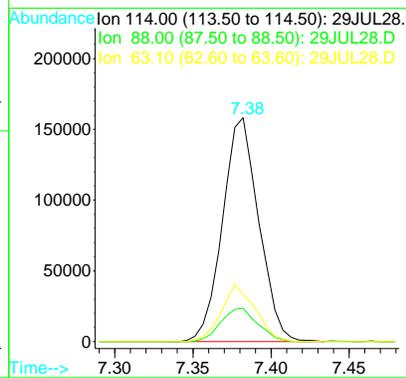
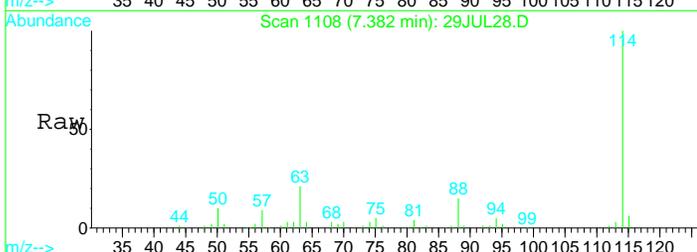
Tgt Ion	Resp	Lower	Upper
65	53238		
67	50.8	36.2	67.2
51	49.1	42.0	78.0





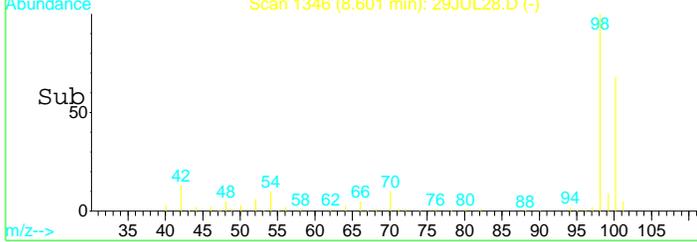
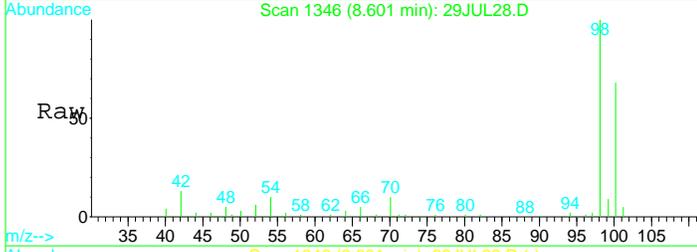
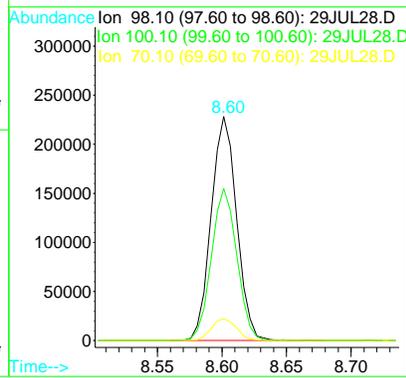
#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. 0.00 min
 Lab File: 29JUL28.D
 Acq: 30 Jul 2017 12:53 am

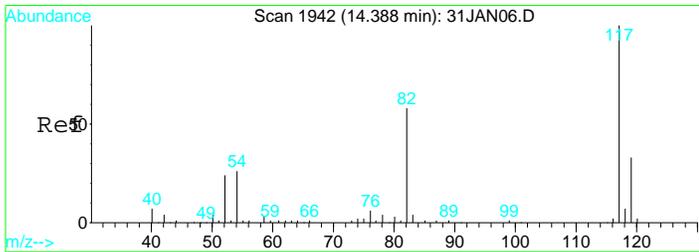
Tgt Ion	Resp	Lower	Upper
114	100		
88	15.3	11.7	21.7
63	23.9	16.7	30.9



#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL28.D
 Acq: 30 Jul 2017 12:53 am

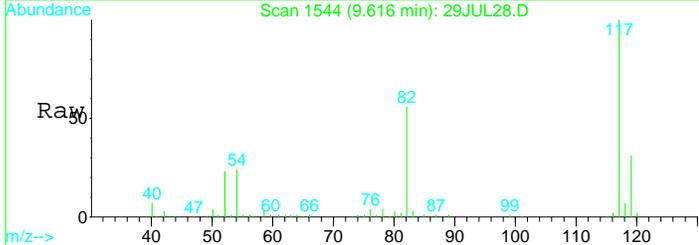
Tgt Ion	Resp	Lower	Upper
98	100		
100	67.6	49.7	92.3
70	9.6	7.3	13.7



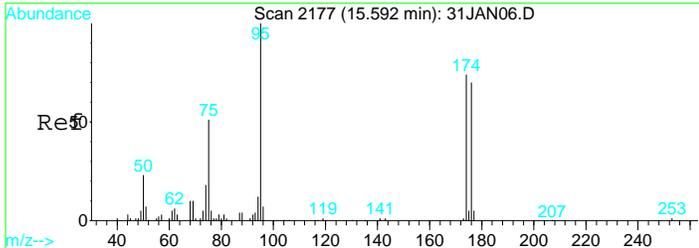
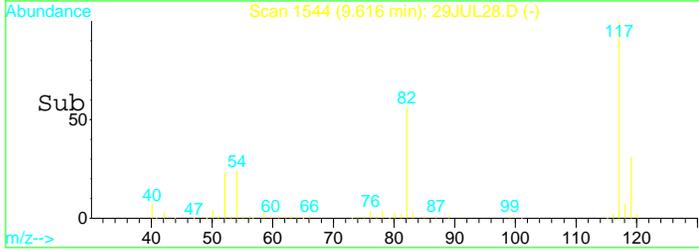
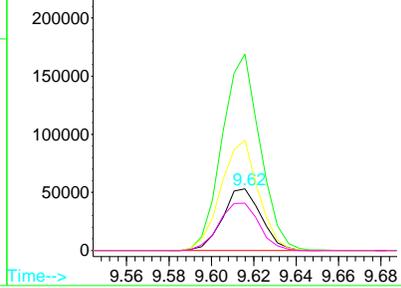


#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.62 min Scan# 1544
 Delta R.T. 0.00 min
 Lab File: 29JUL28.D
 Acq: 30 Jul 2017 12:53 am

Tgt Ion	Resp	Lower	Upper
119	67498		
119	100		
117	312.1	214.5	398.4
82	173.4	117.7	218.7
54	79.7	55.2	102.4

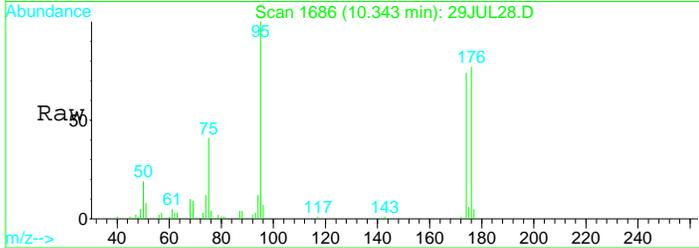


Abundance Ion 119.00 (118.50 to 119.50): 29JUL28.D
 Ion 117.00 (116.50 to 117.50): 29JUL28.D
 Ion 82.10 (81.60 to 82.60): 29JUL28.D
 Ion 54.10 (53.60 to 54.60): 29JUL28.D

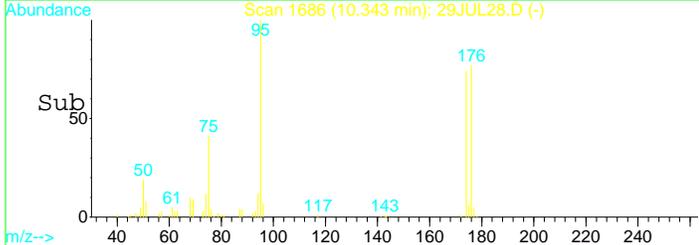
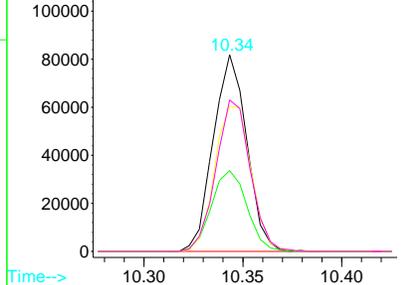


#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL28.D
 Acq: 30 Jul 2017 12:53 am

Tgt Ion	Resp	Lower	Upper
95	96425		
95	100		
75	43.5	29.5	54.7
174	80.0	52.3	97.1
176	78.6	49.6	92.2



Abundance Ion 95.00 (94.50 to 95.50): 29JUL28.D
 Ion 75.00 (74.50 to 75.50): 29JUL28.D
 Ion 173.90 (173.40 to 174.40): 29JUL28.D
 Ion 175.90 (175.40 to 176.40): 29JUL28.D



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL28.D Vial: 28
 Acq On : 30 Jul 2017 12:53 am Operator: MGC
 Sample : 1720405-20 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:50 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	173969	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	254930	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	67498	10.00	ug/L	0.00

Target Compounds Qvalue

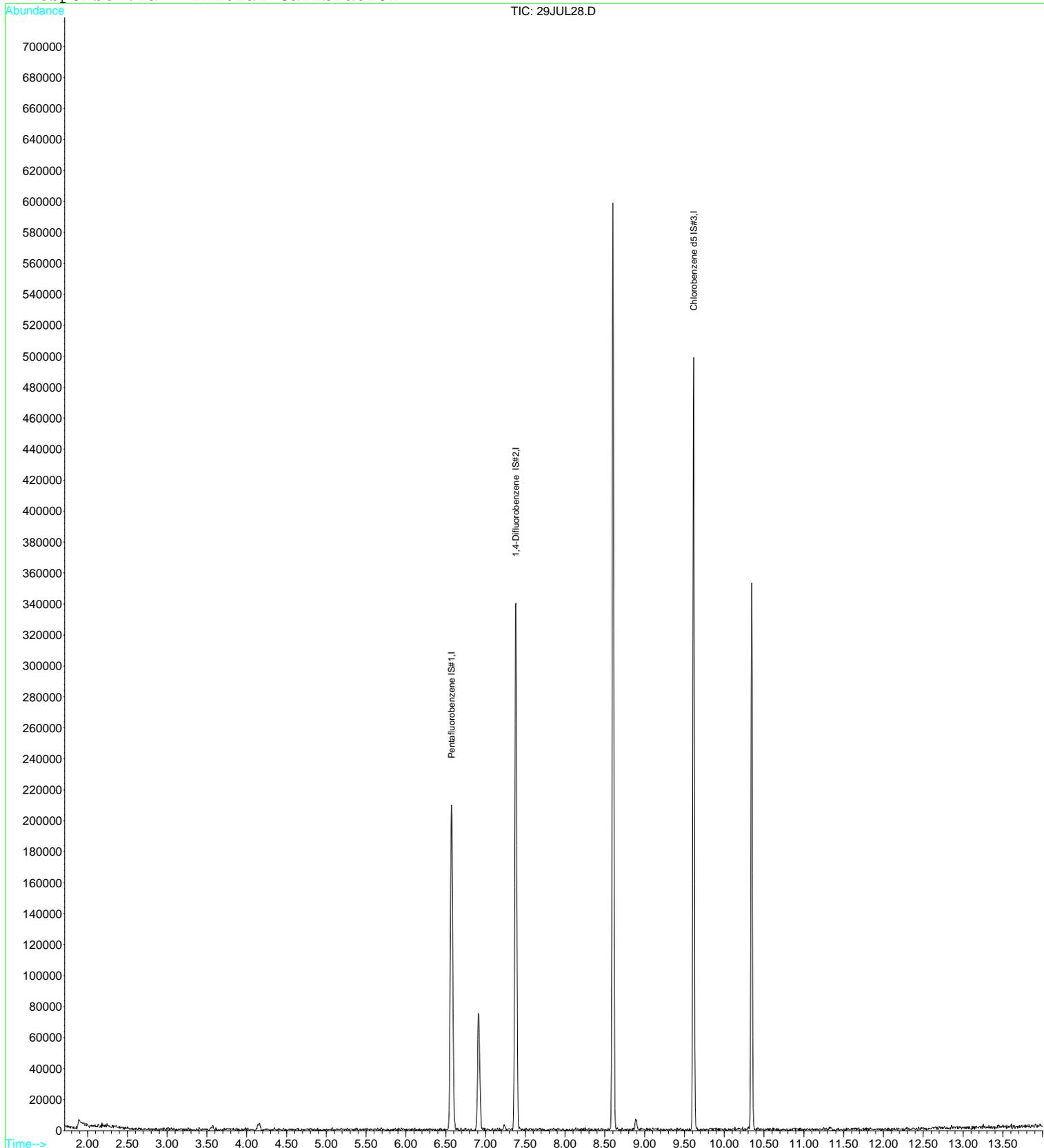
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL28.D
Acq On : 30 Jul 2017 12:53 am
Sample : 1720405-20
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:50 2017

Vial: 28
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL29.D
 Acq On : 30 Jul 2017 1:16 am
 Sample : 1720405-21
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:36 2017

Vial: 29
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	153800	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	220535	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	61598	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	46753	10.41	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	104.10%
31) Toluene d8 SMC#2	8.60	98	268448	9.86	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.60%
49) Bromofluorobenzene SMC#3	10.35	95	84733	9.21	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	92.10%

Target Compounds

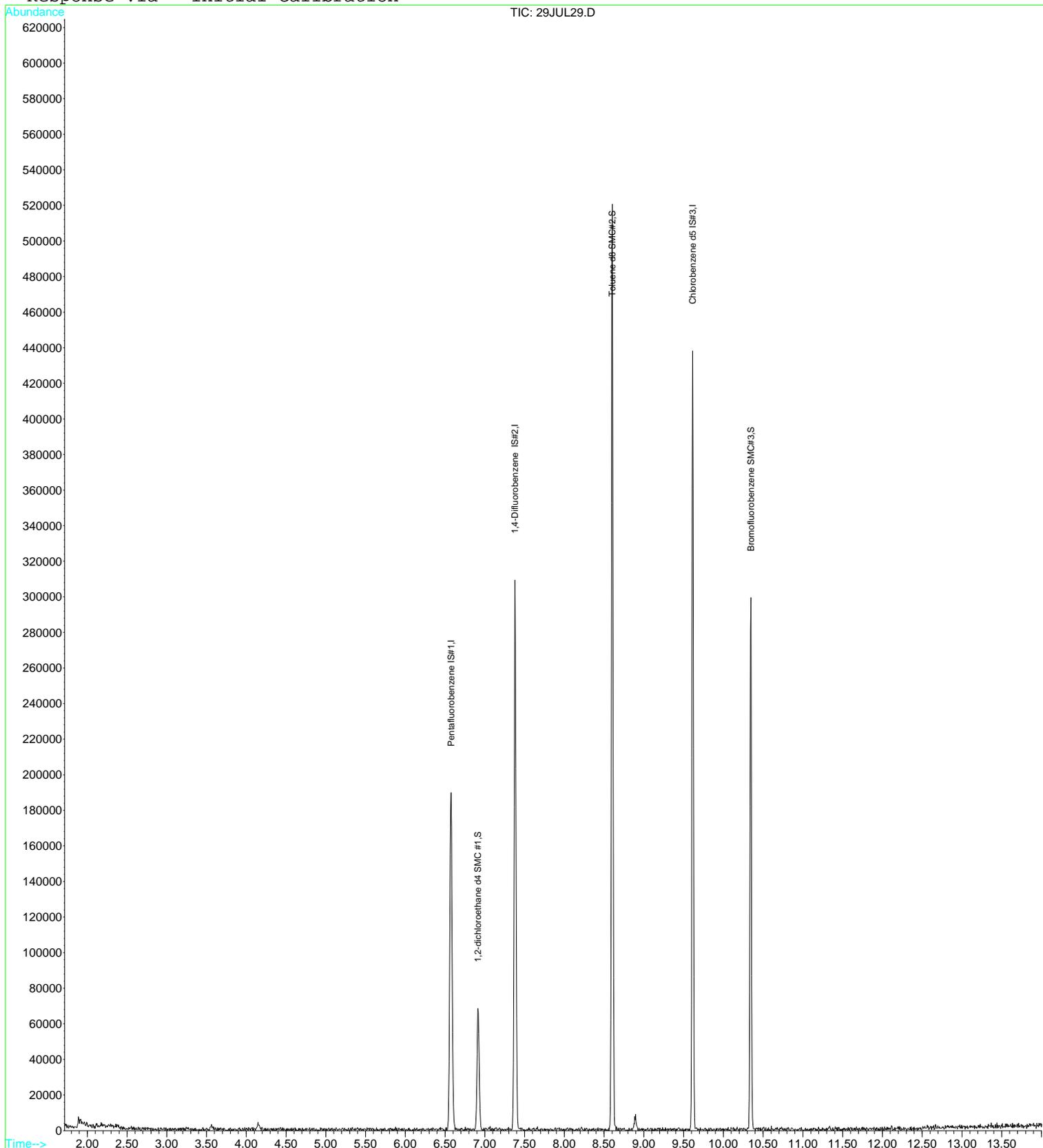
Qvalue

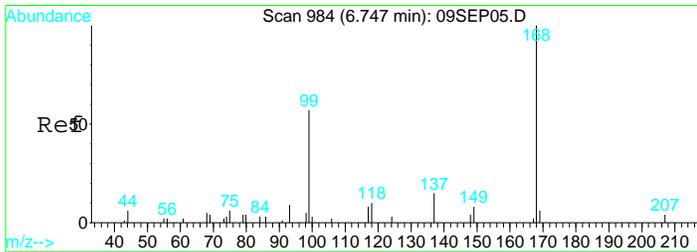
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL29.D
 Acq On : 30 Jul 2017 1:16 am
 Sample : 1720405-21
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:36 2017

Vial: 29
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

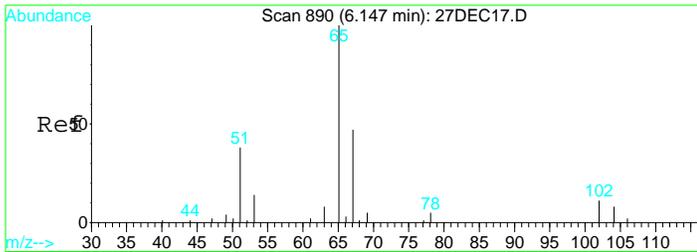
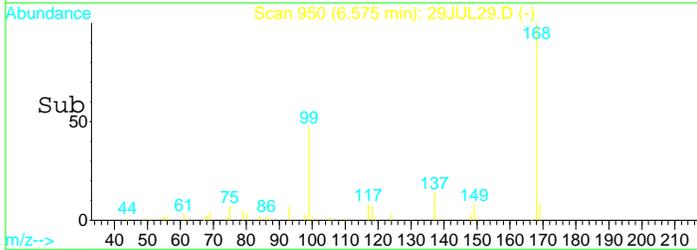
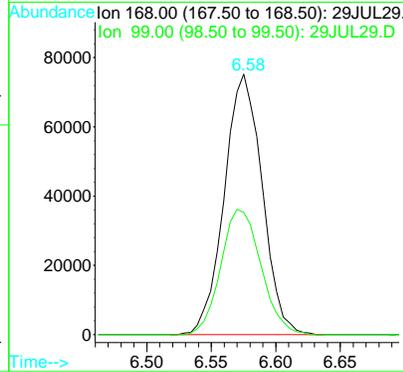
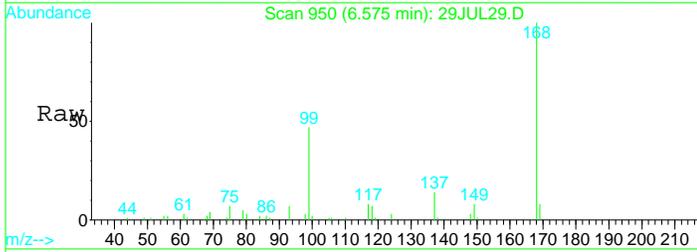
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





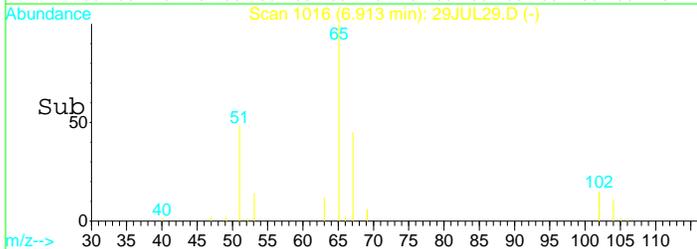
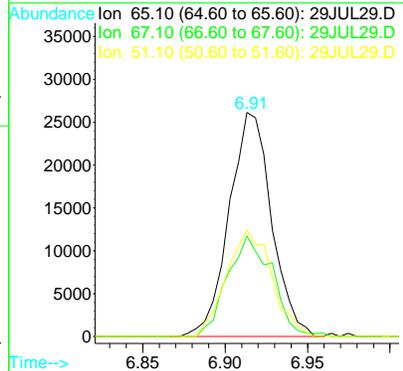
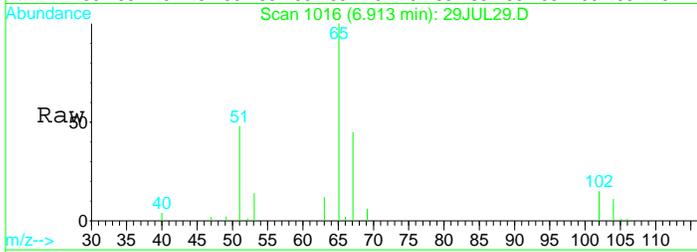
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.58 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL29.D
 Acq: 30 Jul 2017 1:16 am

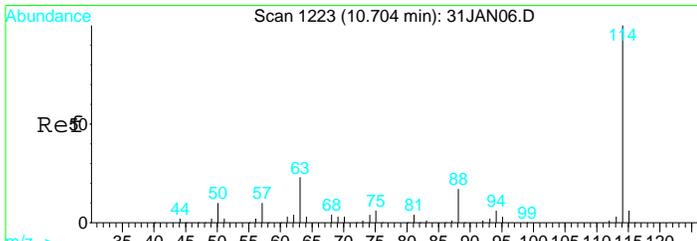
Tgt Ion	Resp	Lower	Upper
168	153800		
99	50.9	38.7	71.9



#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 29JUL29.D
 Acq: 30 Jul 2017 1:16 am

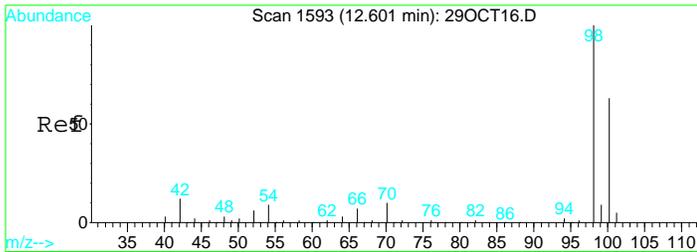
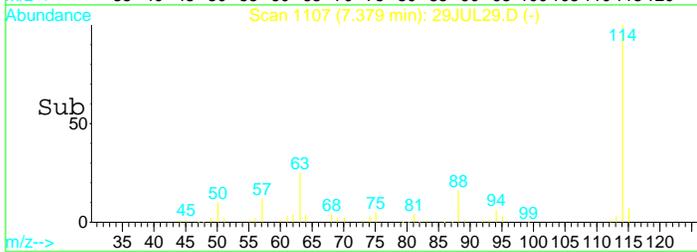
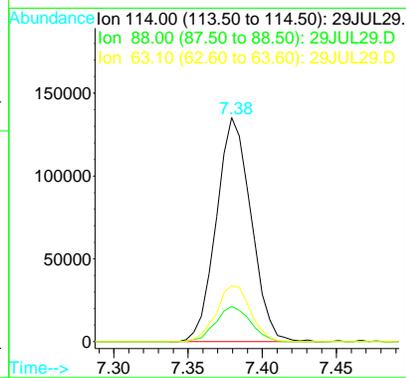
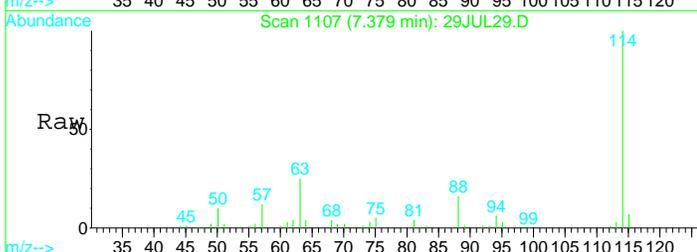
Tgt Ion	Resp	Lower	Upper
65	46753		
67	47.5	36.2	67.2
51	51.0	42.0	78.0





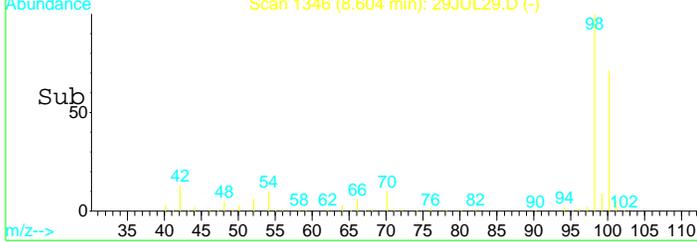
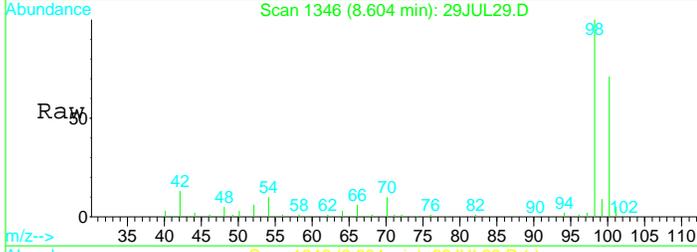
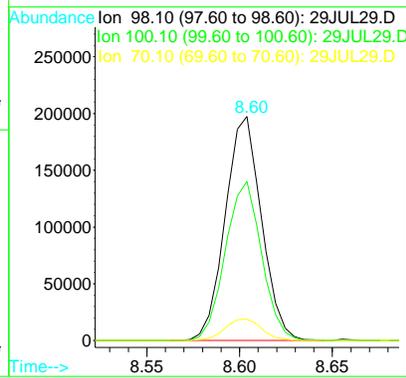
#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 29JUL29.D
 Acq: 30 Jul 2017 1:16 am

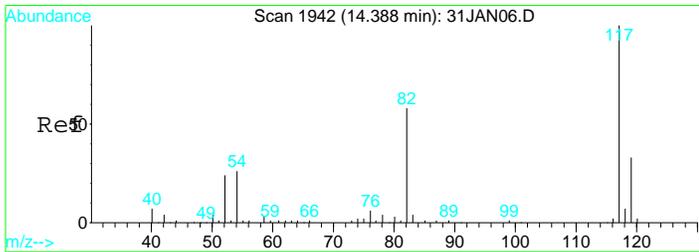
Tgt Ion	Resp	Lower	Upper
114	100		
88	15.8	11.7	21.7
63	24.6	16.7	30.9



#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 29JUL29.D
 Acq: 30 Jul 2017 1:16 am

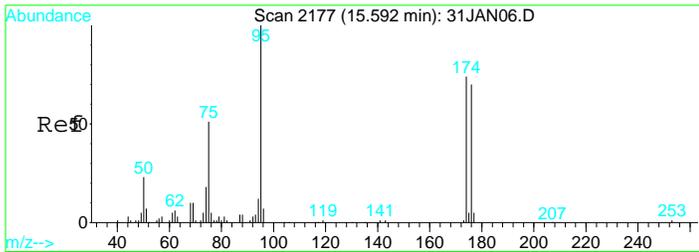
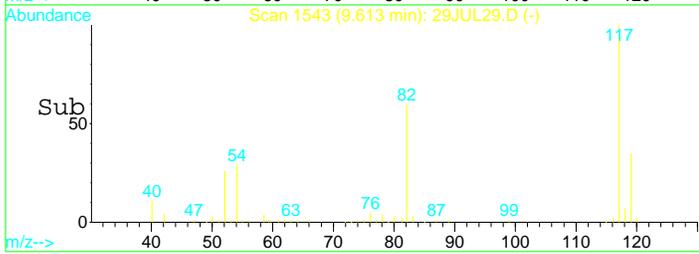
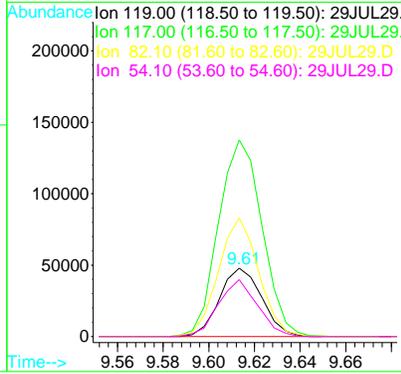
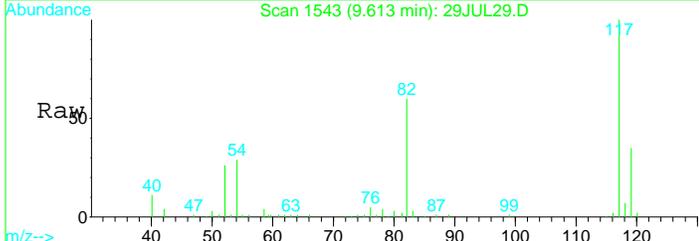
Tgt Ion	Resp	Lower	Upper
98	100		
100	70.7	49.7	92.3
70	9.8	7.3	13.7





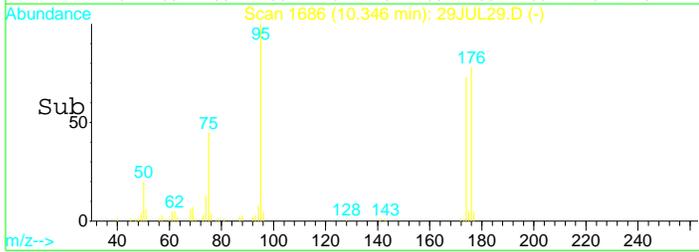
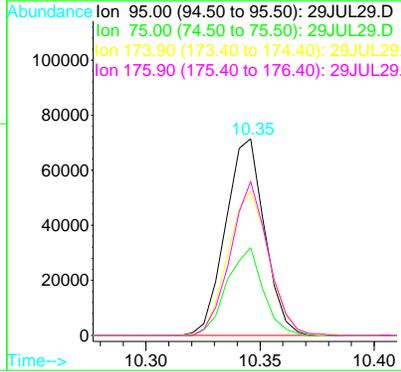
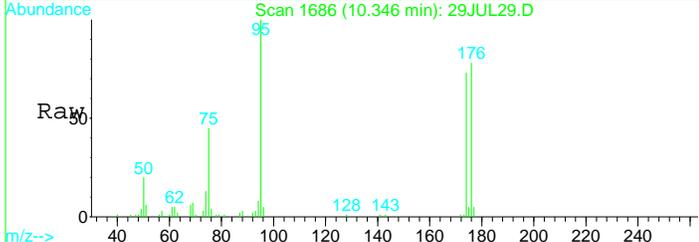
#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 29JUL29.D
 Acq: 30 Jul 2017 1:16 am

Tgt Ion	Resp	Lower	Upper
119	61598		
117	296.0	214.5	398.4
82	165.5	117.7	218.7
54	77.3	55.2	102.4



#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.35 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL29.D
 Acq: 30 Jul 2017 1:16 am

Tgt Ion	Resp	Lower	Upper
95	84733		
95	100		
75	41.5	29.5	54.7
174	76.5	52.3	97.1
176	75.8	49.6	92.2



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL29.D Vial: 29
 Acq On : 30 Jul 2017 1:16 am Operator: MGC
 Sample : 1720405-21 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:50 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	153800	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	220535	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	61598	10.00	ug/L	0.00

Target Compounds Qvalue

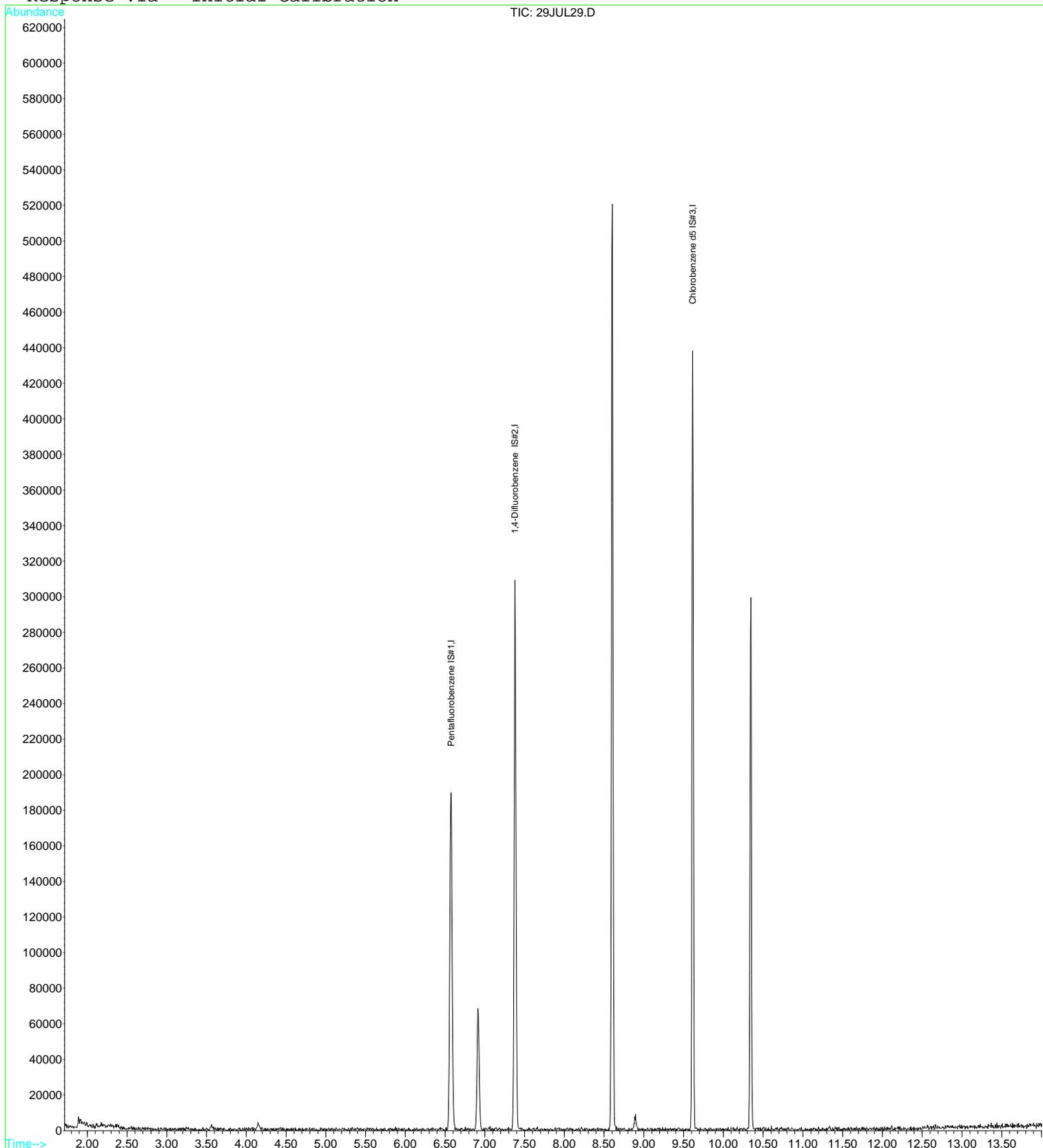
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL29.D
Acq On : 30 Jul 2017 1:16 am
Sample : 1720405-21
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:50 2017

Vial: 29
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL30.D
 Acq On : 30 Jul 2017 1:39 am
 Sample : 1720405-22
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:36 2017

Vial: 30
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	173986	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	252892	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	66088	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	53179	10.46	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	104.60%
31) Toluene d8 SMC#2	8.60	98	309382	9.91	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.10%
49) Bromofluorobenzene SMC#3	10.35	95	98038	9.93	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.30%

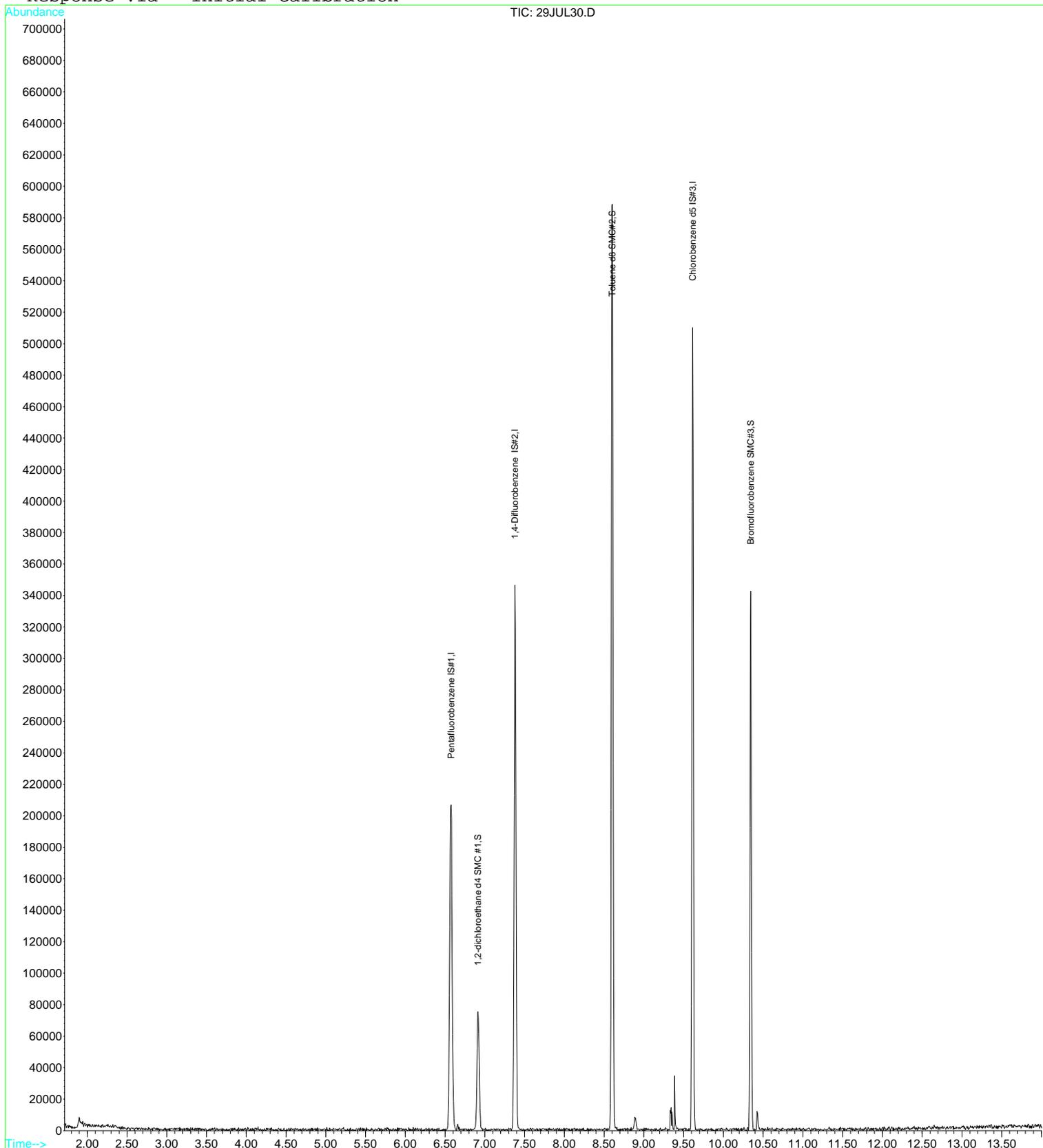
Target Compounds Qvalue

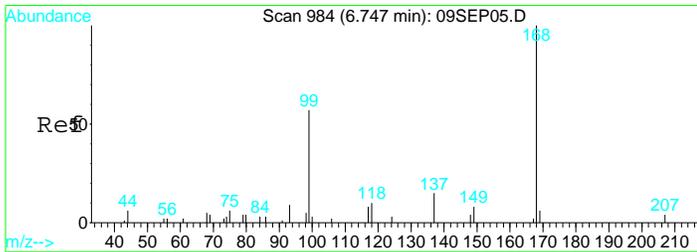
Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL30.D
Acq On : 30 Jul 2017 1:39 am
Sample : 1720405-22
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:36 2017

Vial: 30
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

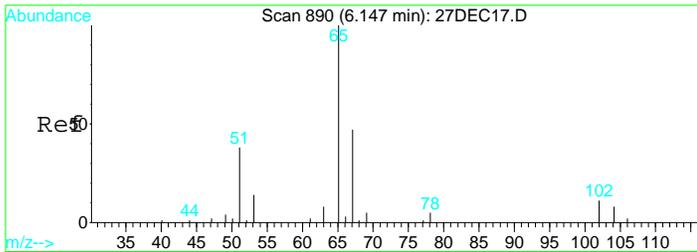
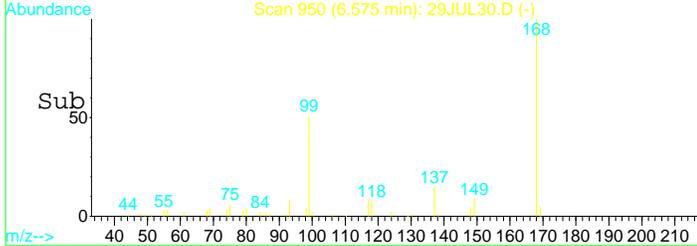
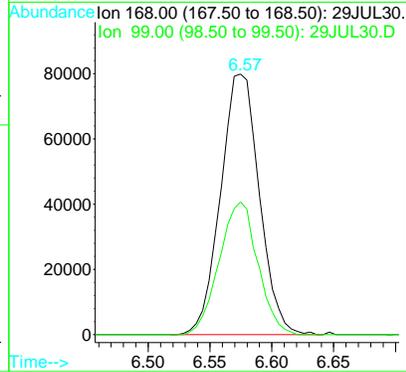
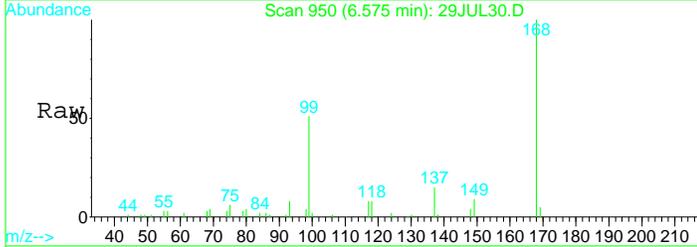
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





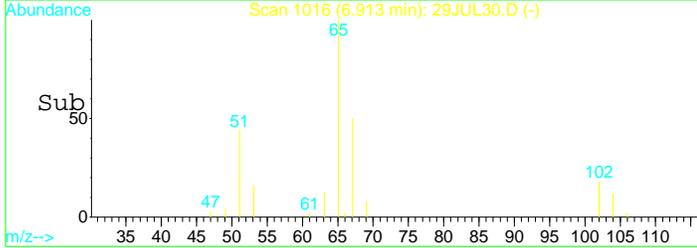
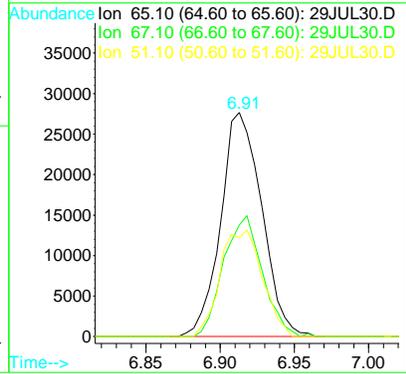
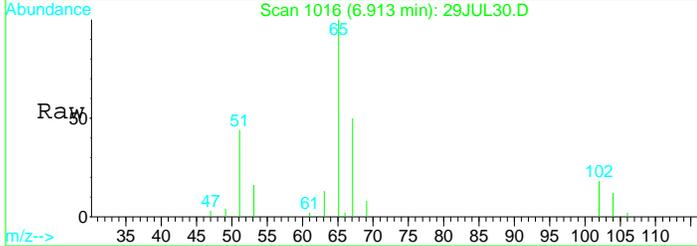
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 29JUL30.D
 Acq: 30 Jul 2017 1:39 am

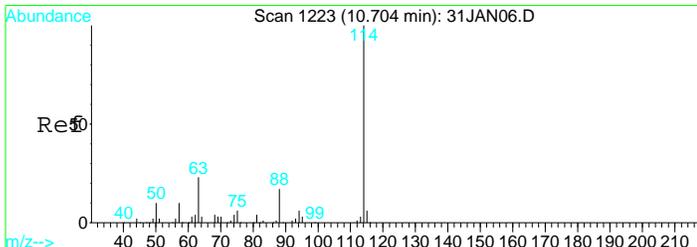
Tgt Ion: 168 Resp: 173986
 Ion Ratio Lower Upper
 168 100
 99 50.5 38.7 71.9



#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 29JUL30.D
 Acq: 30 Jul 2017 1:39 am

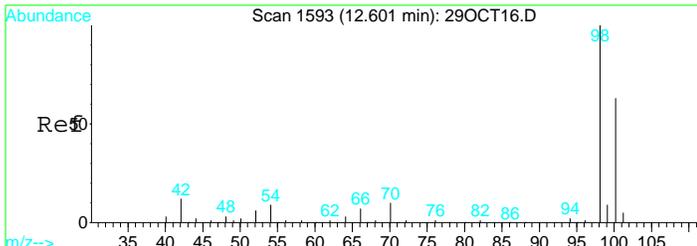
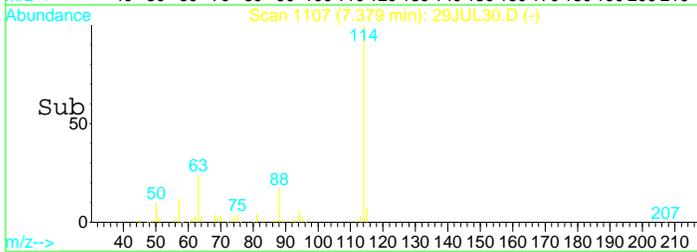
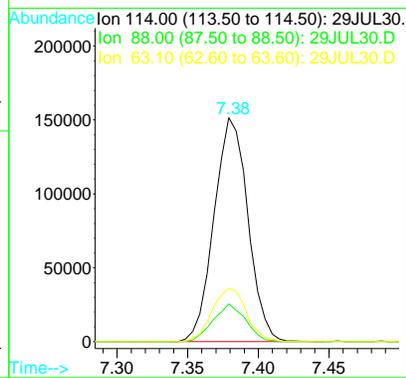
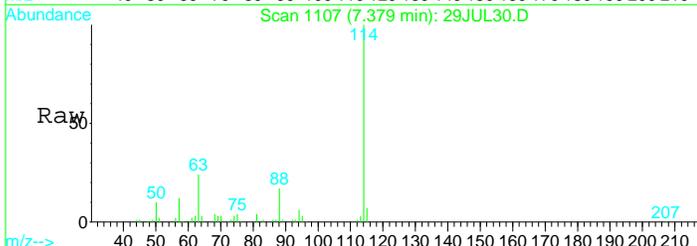
Tgt Ion: 65 Resp: 53179
 Ion Ratio Lower Upper
 65 100
 67 51.1 36.2 67.2
 51 48.8 42.0 78.0





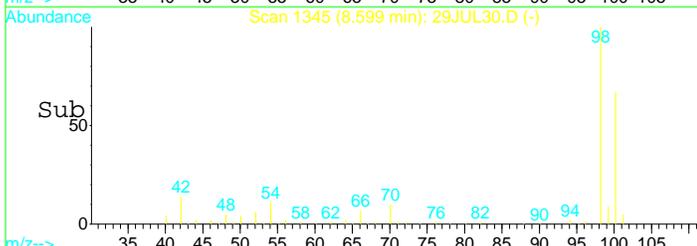
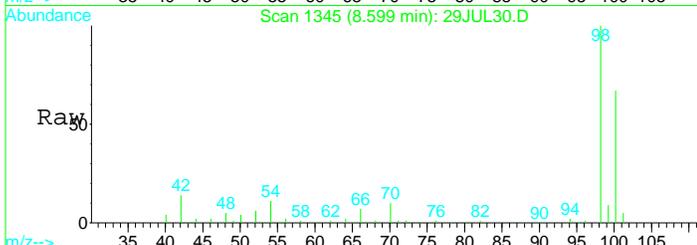
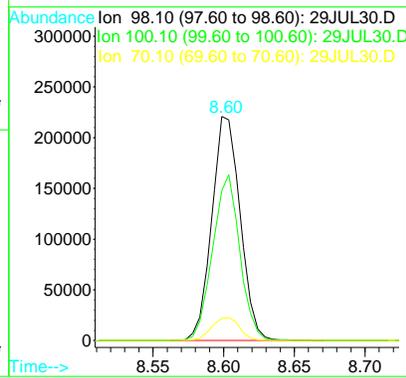
#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 29JUL30.D
 Acq: 30 Jul 2017 1:39 am

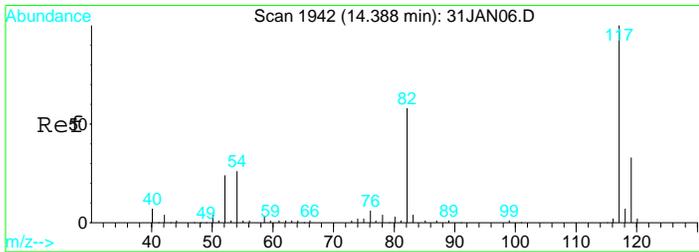
Tgt Ion	Resp	Lower	Upper
114	100		
88	16.3	11.7	21.7
63	24.1	16.7	30.9



#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1345
 Delta R.T. -0.00 min
 Lab File: 29JUL30.D
 Acq: 30 Jul 2017 1:39 am

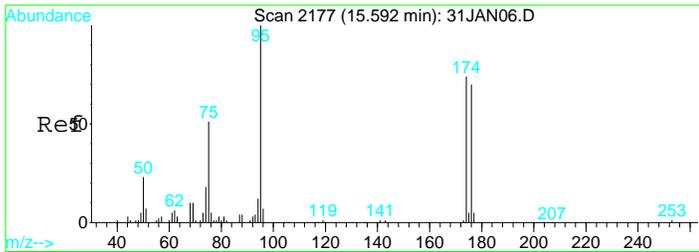
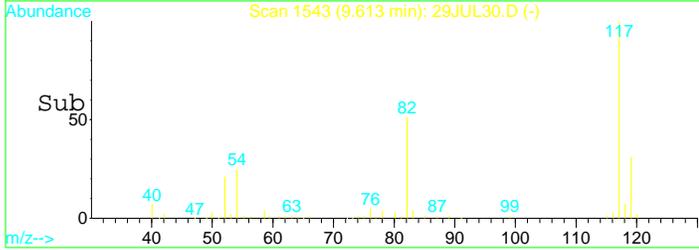
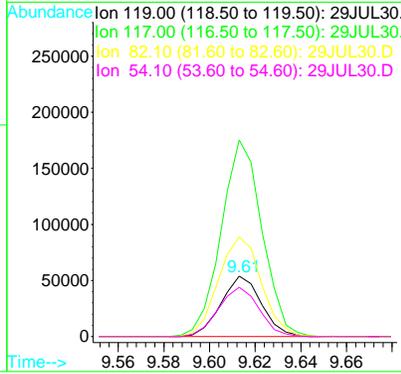
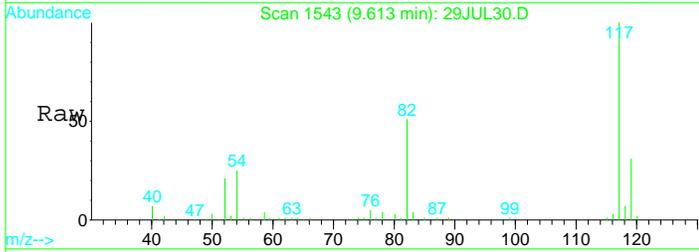
Tgt Ion	Resp	Lower	Upper
98	100		
100	70.7	49.7	92.3
70	10.2	7.3	13.7





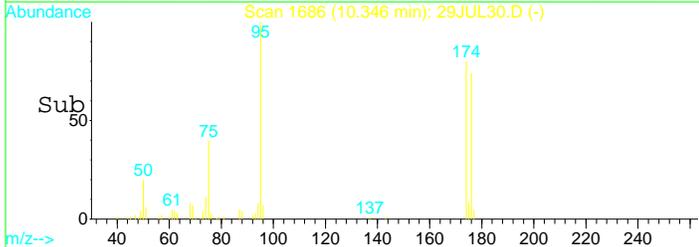
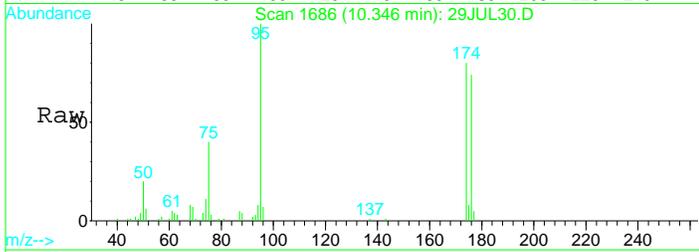
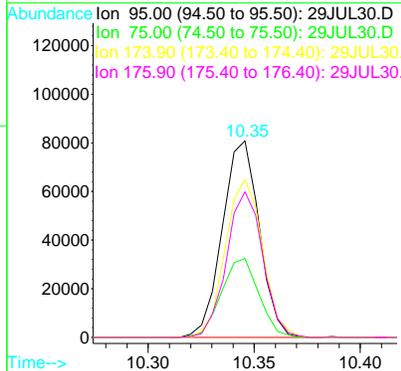
#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 29JUL30.D
 Acq: 30 Jul 2017 1:39 am

Tgt Ion	Resp	Lower	Upper
119	66088		
117	329.0	214.5	398.4
82	175.0	117.7	218.7
54	82.3	55.2	102.4



#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.35 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 29JUL30.D
 Acq: 30 Jul 2017 1:39 am

Tgt Ion	Resp	Lower	Upper
95	98038		
95	100		
75	40.8	29.5	54.7
174	80.8	52.3	97.1
176	72.6	49.6	92.2



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL30.D Vial: 30
 Acq On : 30 Jul 2017 1:39 am Operator: MGC
 Sample : 1720405-22 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:50 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	173986	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	252892	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	66088	10.00	ug/L	0.00

Target Compounds Qvalue

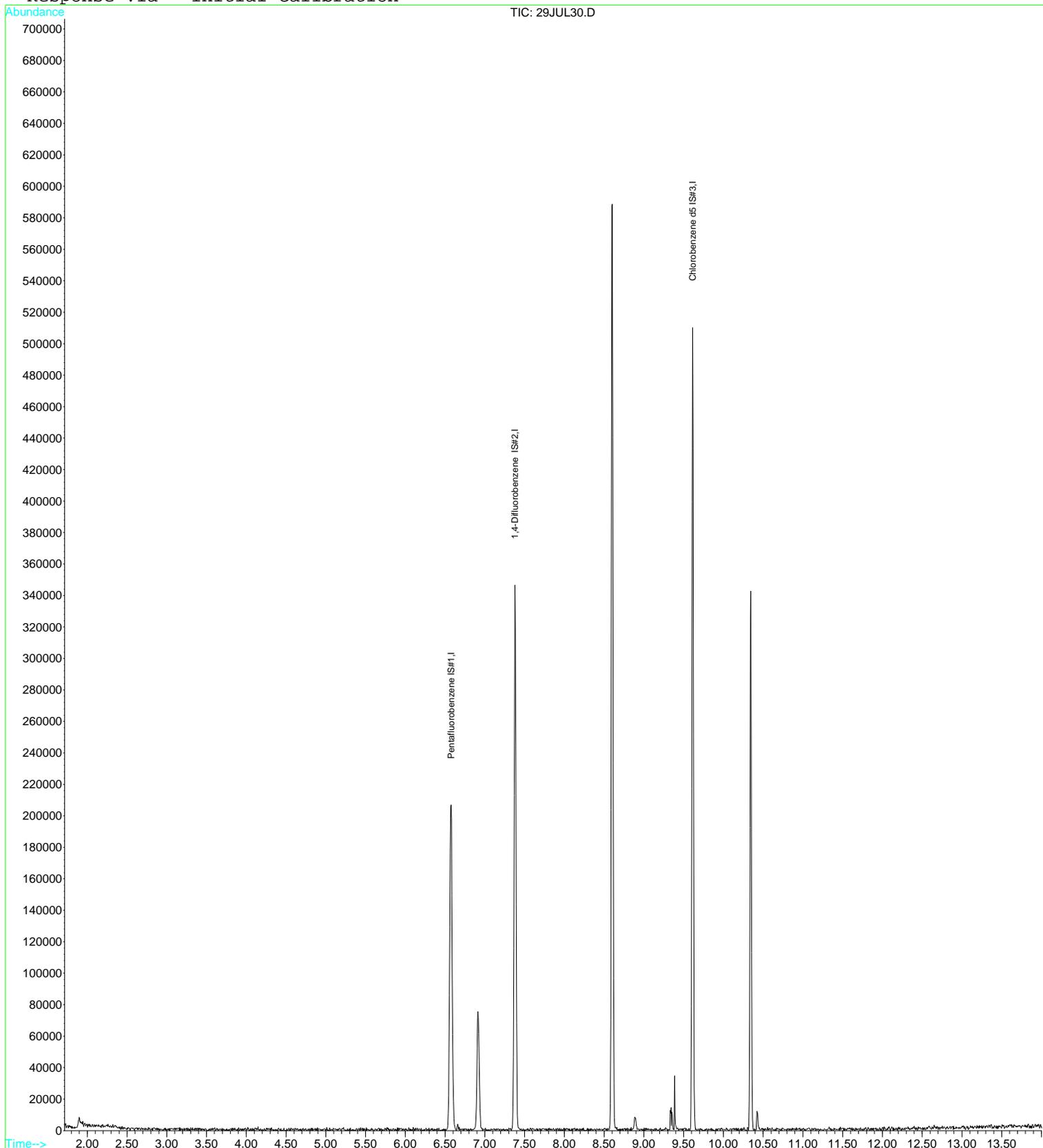
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL30.D
Acq On : 30 Jul 2017 1:39 am
Sample : 1720405-22
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 30 5:50 2017

Vial: 30
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Calibration Standards

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL03.D
 Acq On : 20 Jul 2017 8:32 am
 Sample : 1712752-CAL1
 Misc : 1 VO-109-70507;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 8:46 2017

Vial: 3
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	217011	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	336200	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	90897	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	65374	10.06	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	100.60%
31) Toluene d8 SMC#2	8.60	98	410267	9.86	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.60%
49) Bromofluorobenzene SMC#3	10.35	95	130298	9.68	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.80%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	4360	0.36	ug/L	90
3) Chloromethane	1.94	50	11998	0.58	ug/L	99
4) Vinyl chloride	2.07	62	8395	0.50	ug/L #	69
5) Bromomethane	2.43	94	4401	0.93	ug/L #	72
6) Chloroethane	2.57	64	6138	0.57	ug/L	93
7) Trichlorofluoromethane	2.86	101	6131	0.41	ug/L #	76
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	4044	0.42	ug/L #	84
9) 1,1-Dichloroethene	3.52	61	8614	0.47	ug/L	97
10) Methylene chloride	4.15	84	7409	0.78	ug/L	98
11) MTBE	4.49	73	6455	0.57	ug/L	85
12) T-1,2-dichloroethene	4.51	96	5712	0.50	ug/L	94
13) 1,1-Dichloroethane	5.05	63	12242	0.53	ug/L	100
14) 2,2-Dichloropropane	5.83	77	6502	3.22	ug/L #	1
15) Cis-1,2-dichloroethene	5.83	96	5837	0.52	ug/L	89
16) Bromochloromethane	6.18	128	1853	0.51	ug/L #	88
17) Chloroform	6.32	83	8555	0.51	ug/L	100
18) 1,1,1-Trichloroethane	6.53	97	6787	0.54	ug/L #	53
19) 1,1-Dichloropropene	6.73	75	7443	0.48	ug/L	94
20) Carbon tetrachloride	6.71	119	4464	1.80	ug/L #	74
22) 1,2-Dichloroethane	6.99	62	4167	0.45	ug/L #	99
23) Benzene	6.93	78	23929	0.53	ug/L	87
25) Trichloroethene	7.60	130	5562	0.45	ug/L	88
26) 1,2-Dichloropropane	7.84	63	6298	0.50	ug/L #	96
27) Dibromomethane	7.90	93	1490	0.46	ug/L #	73
28) Bromodichloromethane	8.06	83	4855	0.54	ug/L	90
29) 2-ceve	8.28	63	6159	1.92	ug/L #	95
30) Cis-1,3-dichloropropene	8.39	75	5596	1.85	ug/L #	87
32) Toluene	8.65	92	15200	0.50	ug/L	80
33) Trans-1,3-dichloropropene	8.82	75	3122	2.84	ug/L	85
34) 1,1,2-Trichloroethane	8.96	97	2429	0.48	ug/L	92
35) Tetrachloroethene (PCE)	9.03	166	5719	0.51	ug/L #	87
36) 1,3-Dichloropropane	9.08	76	4332	0.53	ug/L #	81
37) Dibromochloromethane	9.24	129	2321	2.09	ug/L #	85
38) 1,2-Dibromoethane	9.32	107	2337	1.18	ug/L	69
40) Chlorobenzene	9.63	112	16901	0.56	ug/L	95
41) 1,1,1,2-Tetrachloroethane	9.69	131	3340	0.98	ug/L #	70
42) Ethylbenzene	9.69	106	8787	0.49	ug/L	85
43) P+m-Xylene	9.77	106	24229	1.12	ug/L	95
44) O-Xylene	10.01	106	9945	0.50	ug/L	93
45) Styrene	10.02	104	15101	0.50	ug/L	92
46) Bromoform	10.16	173	935	3.01	ug/L #	100
47) Isopropylbenzene	10.23	105	27332	0.53	ug/L	96
48) 1,1,2,2-Tetrachloroethane	10.41	83	2268	0.45	ug/L	86
50) 1,2,3-Trichloropropene	10.45	110	229	Below	Cal #	100
51) n-propylbenzene	10.47	91	35646	0.54	ug/L	92

(#) = qualifier out of range (m) = manual integration
 20JUL03.D 82605.M Thu Jul 20 10:17:26 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL03.D Vial: 3
 Acq On : 20 Jul 2017 8:32 am Operator: MGC
 Sample : 1712752-CAL1 Inst : MS-V5
 Misc : 1 VO-109-70507;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 8:46 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

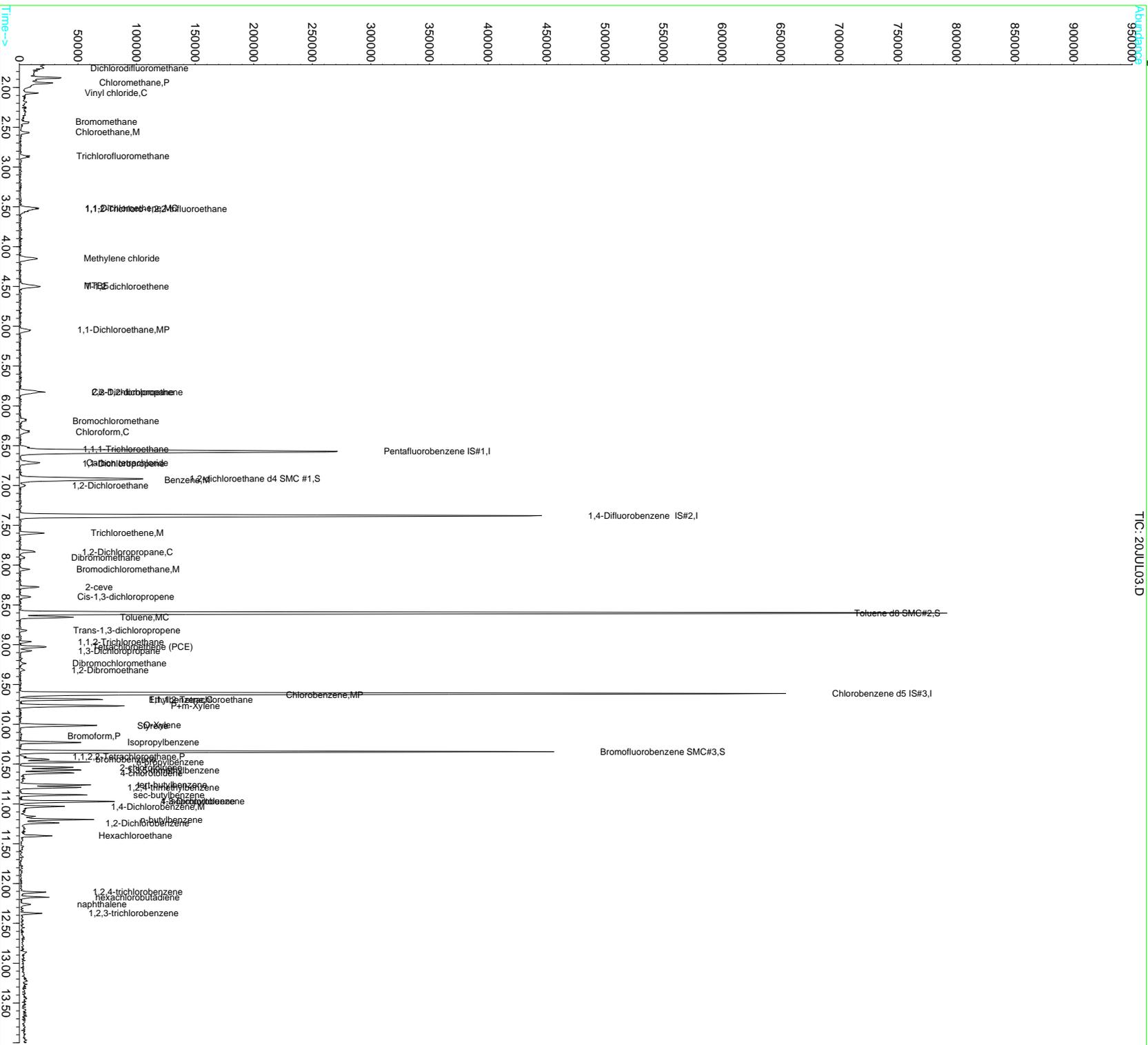
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	5541	0.53	ug/L	79
53) 1,3,5-trimethylbenzene	10.58	105	22586	0.53	ug/L	95
54) 2-chlorotoluene	10.54	91	21303	0.51	ug/L	94
55) 4-chlorotoluene	10.61	91	19917	0.51	ug/L	87
56) tert-butylbenzene	10.77	119	21617	0.49	ug/L	98
57) 1,2,4-trimethylbenzene	10.80	105	22333	0.53	ug/L	97
58) sec-butylbenzene	10.89	105	30496	0.53	ug/L	98
59) 4-isopropyltoluene	10.97	119	25793	0.55	ug/L	98
60) 1,3-Dichlorobenzene	10.98	146	11500	0.50	ug/L	94
61) 1,4-Dichlorobenzene	11.03	146	10889	0.47	ug/L	95
62) n-butylbenzene	11.20	91	23084	0.53	ug/L	99
63) 1,2-Dichlorobenzene	11.24	146	10212	0.52	ug/L	96
64) Hexachloroethane	11.40	117	2279	3.97	ug/L #	6
66) 1,2,4-trichlorobenzene	12.11	180	5686	0.55	ug/L	94
67) hexachlorobutadiene	12.17	225	4421	0.57	ug/L #	70
68) naphthalene	12.26	128	6587	0.53	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	4987	0.63	ug/L	96

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL03.D
 Acq On : 20 Jul 2017 8:32 am
 Sample : 1712752-CAL1
 Misc : 1 VO-109-70507;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 8:46 2017

Vial: 3
 Operator: MGC
 Inst: MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL05.D
 Acq On : 20 Jul 2017 9:18 am
 Sample : 1712752-CAL2
 Misc : 1 VO-109-70508;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017

Vial: 5
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	219386	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	341653	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	89283	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	66214	10.08	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	100.80%
31) Toluene d8 SMC#2	8.60	98	421815	9.98	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.80%
49) Bromofluorobenzene SMC#3	10.34	95	133853	10.12	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.20%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	10205	0.84	ug/L	98
3) Chloromethane	1.95	50	21928	1.05	ug/L	97
4) Vinyl chloride	2.07	62	17214	1.01	ug/L #	76
5) Bromomethane	2.44	94	8855	1.39	ug/L #	79
6) Chloroethane	2.57	64	12085	1.10	ug/L	85
7) Trichlorofluoromethane	2.87	101	13464	0.88	ug/L #	74
8) 1,1,2-Trichloro-1,2,2-trif	3.54	101	8620	0.88	ug/L #	76
9) 1,1-Dichloroethene	3.52	61	18131	0.97	ug/L	93
10) Methylene chloride	4.15	84	10296	1.07	ug/L	86
11) MTBE	4.49	73	13643	1.20	ug/L	91
12) T-1,2-dichloroethene	4.50	96	10984	0.96	ug/L	92
13) 1,1-Dichloroethane	5.05	63	23710	1.01	ug/L	97
14) 2,2-Dichloropropane	5.83	77	12259	3.73	ug/L #	1
15) Cis-1,2-dichloroethene	5.82	96	12328	1.10	ug/L #	81
16) Bromochloromethane	6.17	128	3878	1.06	ug/L #	100
17) Chloroform	6.33	83	17811	1.05	ug/L	94
18) 1,1,1-Trichloroethane	6.52	97	14284	1.11	ug/L #	74
19) 1,1-Dichloropropene	6.72	75	15992	1.02	ug/L	95
20) Carbon tetrachloride	6.71	119	8848	2.24	ug/L #	60
22) 1,2-Dichloroethane	7.00	62	9765	1.04	ug/L #	92
23) Benzene	6.93	78	48005	1.05	ug/L #	59
25) Trichloroethene	7.61	130	11662	0.94	ug/L	94
26) 1,2-Dichloropropane	7.83	63	13360	1.04	ug/L #	94
27) Dibromomethane	7.91	93	3278	0.99	ug/L #	75
28) Bromodichloromethane	8.05	83	8927	0.97	ug/L	94
29) 2-ceve	8.28	63	12934	3.96	ug/L	85
30) Cis-1,3-dichloropropene	8.40	75	11335	2.29	ug/L #	88
32) Toluene	8.65	92	29659	0.96	ug/L	82
33) Trans-1,3-dichloropropene	8.82	75	7084	3.30	ug/L	95
34) 1,1,2-Trichloroethane	8.97	97	5837	1.15	ug/L	89
35) Tetrachloroethene (PCE)	9.03	166	11556	1.01	ug/L #	89
36) 1,3-Dichloropropane	9.08	76	9108	1.10	ug/L	89
37) Dibromochloromethane	9.23	129	4037	2.38	ug/L #	87
38) 1,2-Dibromoethane	9.32	107	3858	1.51	ug/L	88
40) Chlorobenzene	9.64	112	31301	1.05	ug/L	96
41) 1,1,1,2-Tetrachloroethane	9.69	131	6727	1.47	ug/L #	59
42) Ethylbenzene	9.69	106	18778	1.06	ug/L	94
43) P+m-Xylene	9.77	106	44367	2.09	ug/L	96
44) O-Xylene	10.01	106	19724	1.01	ug/L	93
45) Styrene	10.02	104	31371	1.05	ug/L	96
46) Bromoform	10.16	173	1829	3.38	ug/L #	100
47) Isopropylbenzene	10.23	105	55335	1.09	ug/L	97
48) 1,1,2,2-Tetrachloroethane	10.41	83	4868	0.99	ug/L	96
50) 1,2,3-Trichloropropene	10.45	110	833	0.51	ug/L #	100
51) n-propylbenzene	10.47	91	67596	1.04	ug/L	96

(#) = qualifier out of range (m) = manual integration
 20JUL05.D 82605.M Thu Jul 20 10:19:25 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL05.D Vial: 5
 Acq On : 20 Jul 2017 9:18 am Operator: MGC
 Sample : 1712752-CAL2 Inst : MS-V5
 Misc : 1 VO-109-70508;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

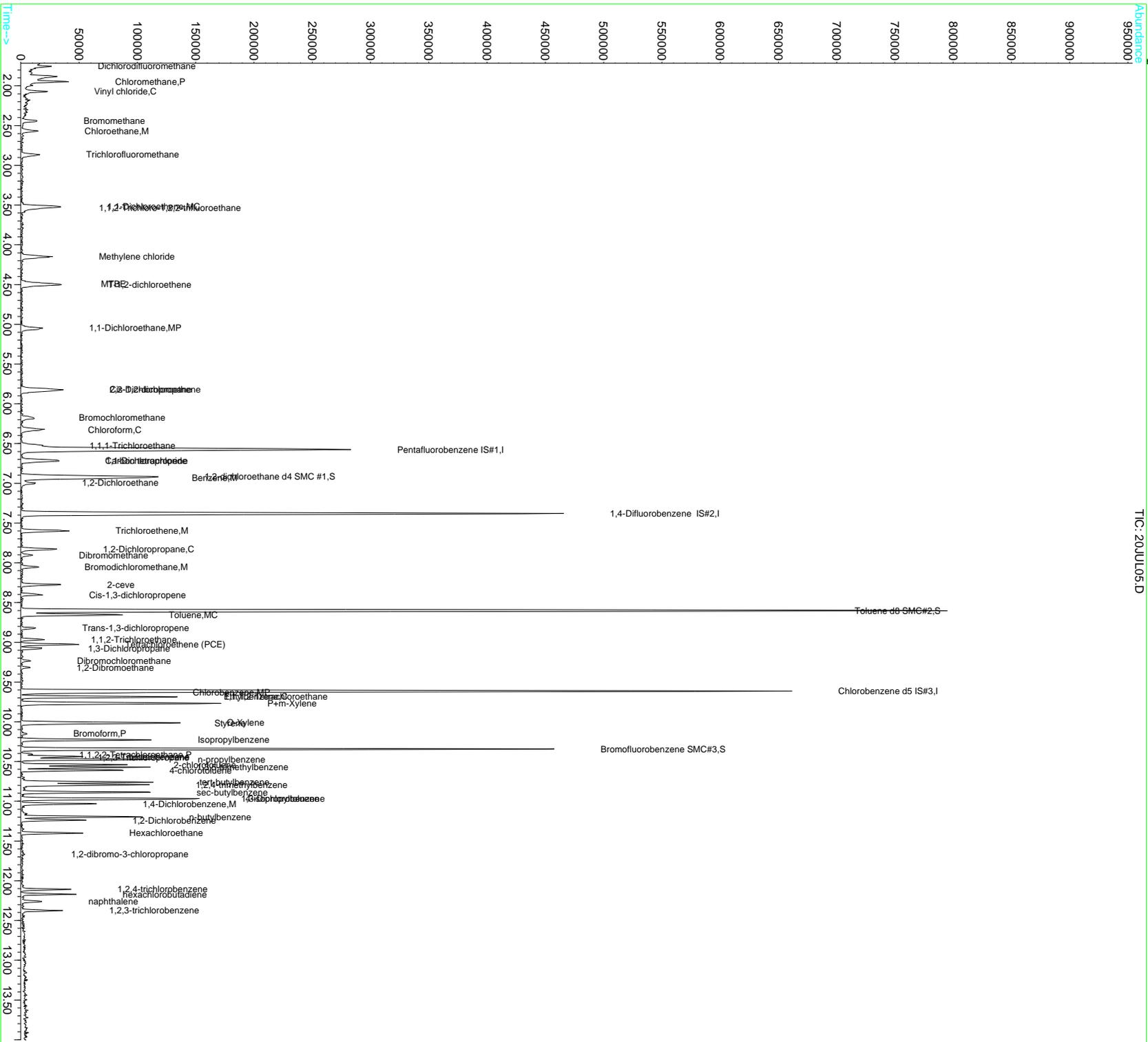
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	10864	1.06	ug/L	85
53) 1,3,5-trimethylbenzene	10.57	105	42696	1.01	ug/L	97
54) 2-chlorotoluene	10.54	91	46110	1.12	ug/L	98
55) 4-chlorotoluene	10.61	91	40015	1.04	ug/L	95
56) tert-butylbenzene	10.76	119	41937	0.98	ug/L	96
57) 1,2,4-trimethylbenzene	10.79	105	45106	1.10	ug/L	95
58) sec-butylbenzene	10.89	105	59925	1.06	ug/L	100
59) 4-isopropyltoluene	10.97	119	48357	1.05	ug/L	99
60) 1,3-Dichlorobenzene	10.98	146	23254	1.02	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	22114m	0.98	ug/L	
62) n-butylbenzene	11.20	91	45926	1.08	ug/L	97
63) 1,2-Dichlorobenzene	11.24	146	19114	1.00	ug/L	96
64) Hexachloroethane	11.40	117	4247	4.26	ug/L #	15
65) 1,2-dibromo-3-chloropropan	11.66	75	581	4.25	ug/L #	100
66) 1,2,4-trichlorobenzene	12.11	180	10744	1.07	ug/L	92
67) hexachlorobutadiene	12.18	225	7178	0.95	ug/L	87
68) naphthalene	12.26	128	11563	0.95	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	8903	1.14	ug/L	99

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL05.D
Acq On : 20 Jul 2017 9:18 am
Sample : 1712752-CAL2
Misc : 1 VO-109-70508;25ML
MS Integration Params: rteint.p
Quant Time: Jul 20 10:19 2017

Vial: 5
Operator: MGC
Inst: MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Wed Jul 12 08:31:09 2017
Response via : Initial Calibration

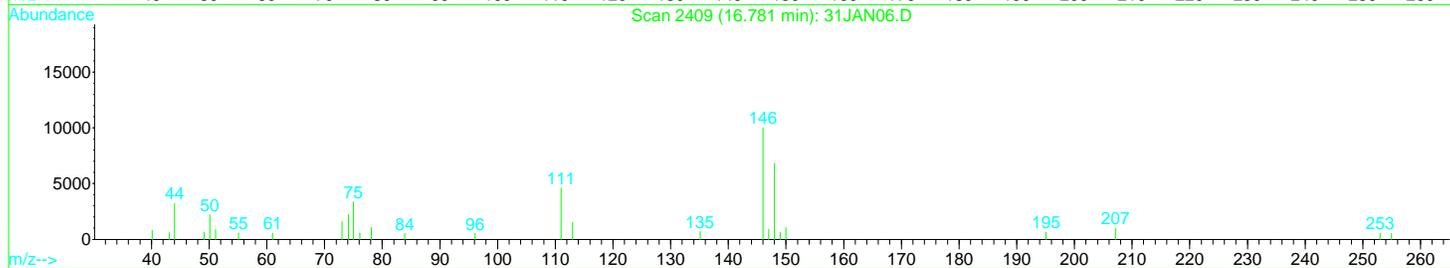
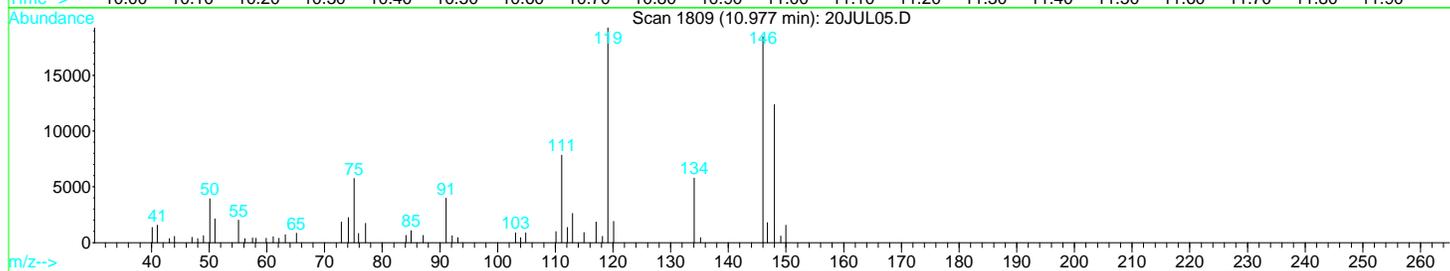
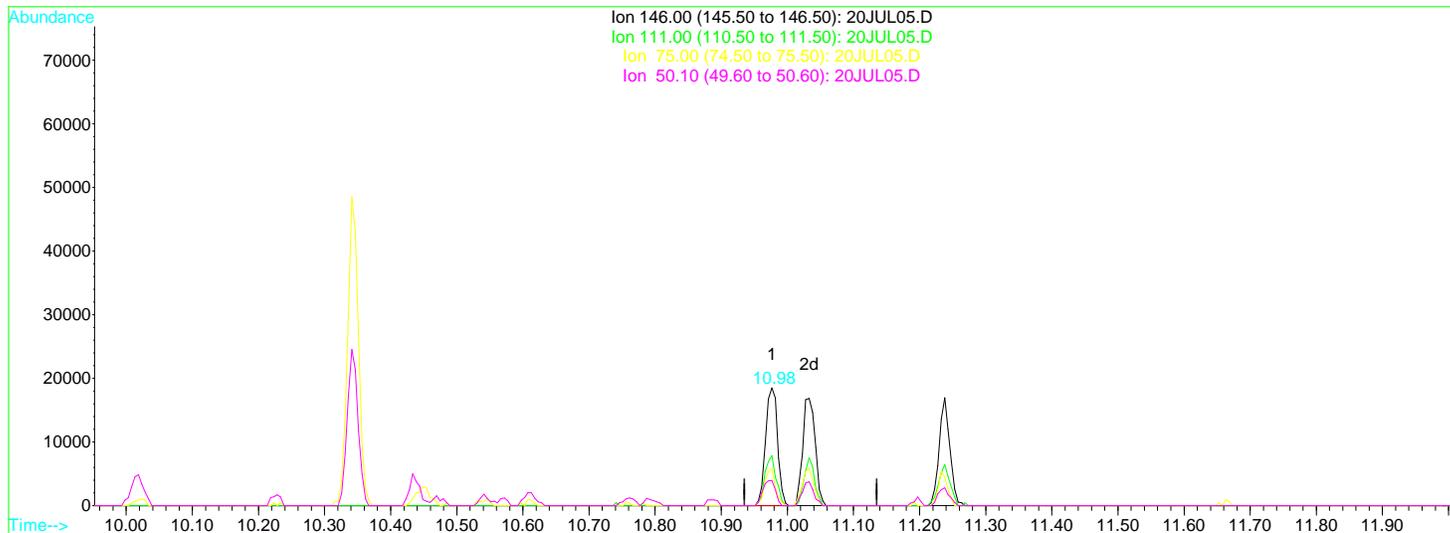


Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL05.D
 Acq On : 20 Jul 2017 9:18 am
 Sample : 1712752-CAL2
 Misc : 1 VO-109-70508;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 9:33 2017

Vial: 5
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Multiple Level Calibration



TIC: 20JUL05.D

(61) 1,4-Dichlorobenzene (M)

10.98min 1.03ug/L

response 23250

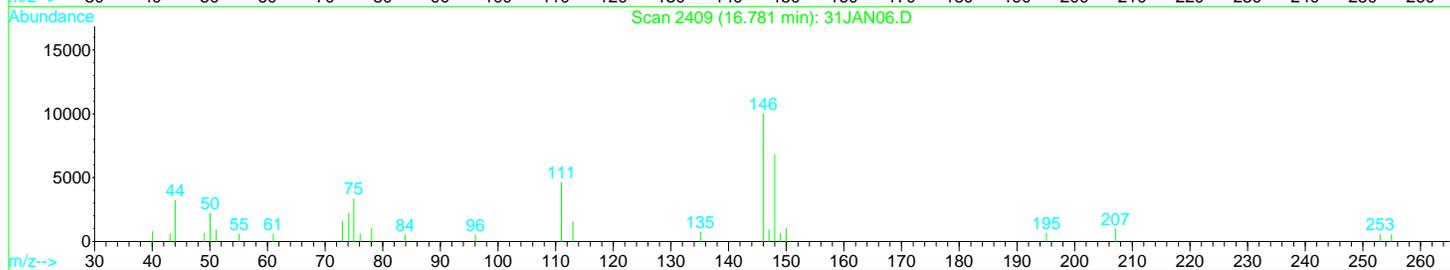
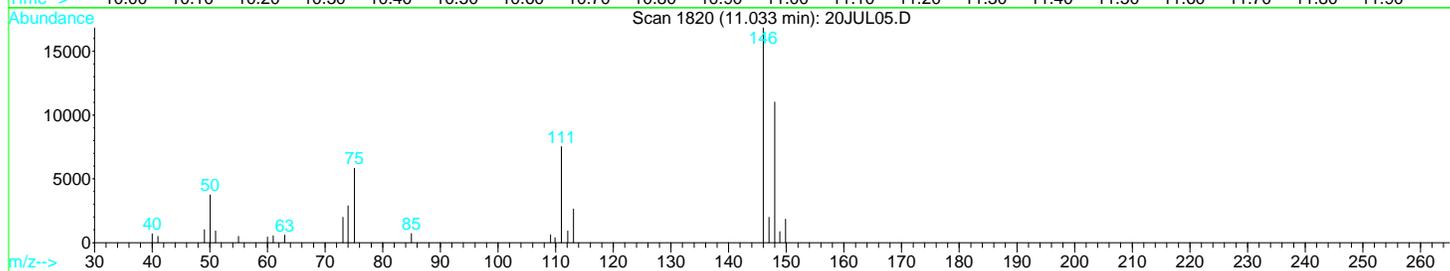
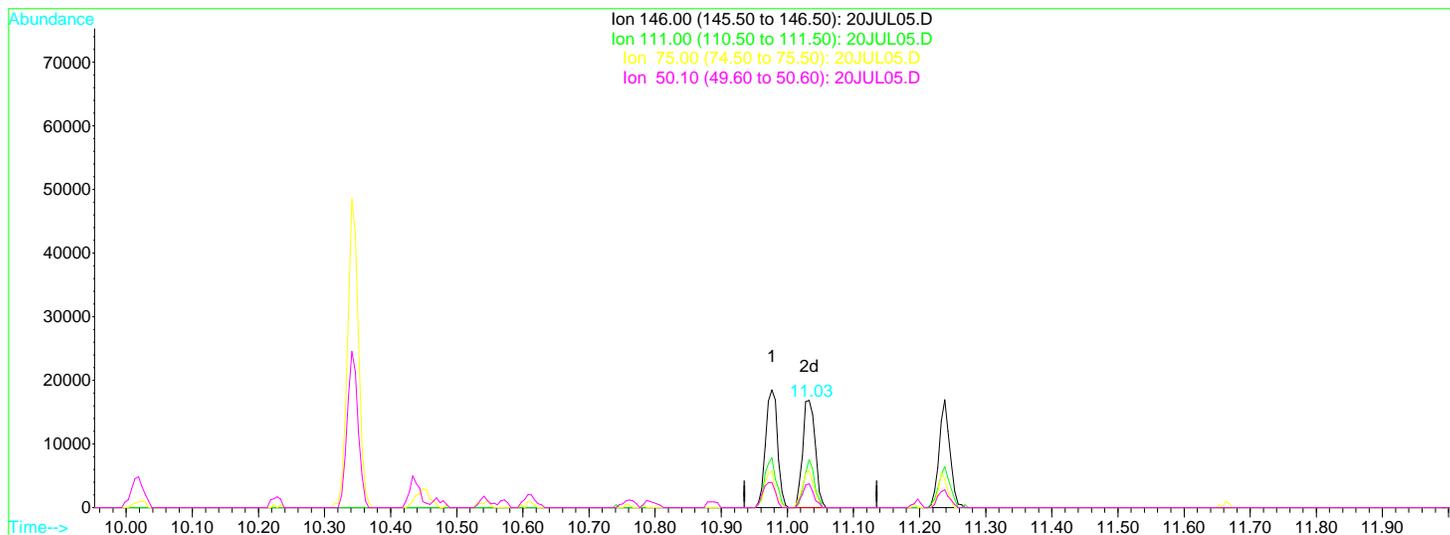
Ion	Exp%	Act%
146.00	100	100
111.00	41.60	39.83
75.00	24.40	27.84
50.10	20.80	22.45

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL05.D
 Acq On : 20 Jul 2017 9:18 am
 Sample : 1712752-CAL2
 Misc : 1 VO-109-70508;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017

Vial: 5
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Multiple Level Calibration



TIC: 20JUL05.D

(61) 1,4-Dichlorobenzene (M)

11.03min 0.98ug/L m

response 22114

Ion	Exp%	Act%
146.00	100	100
111.00	41.60	41.88
75.00	24.40	29.27
50.10	20.80	23.60

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL06.D
 Acq On : 20 Jul 2017 9:42 am
 Sample : 1712752-CAL3
 Misc : 1 VO-109-70509;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 9:56 2017

Vial: 6
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	160100	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	249503	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	66101	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	47251	9.86	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	98.60%
31) Toluene d8 SMC#2	8.60	98	305363	9.89	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.90%
49) Bromofluorobenzene SMC#3	10.34	95	99307	10.14	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.40%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	93410	10.56	ug/L	97
3) Chloromethane	1.95	50	157755	10.37	ug/L	100
4) Vinyl chloride	2.07	62	127041	10.21	ug/L	93
5) Bromomethane	2.44	94	67152	10.11	ug/L #	82
6) Chloroethane	2.57	64	86319	10.80	ug/L	87
7) Trichlorofluoromethane	2.87	101	107360	9.66	ug/L #	72
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	76401	10.68	ug/L	83
9) 1,1-Dichloroethene	3.52	61	141074	10.35	ug/L	97
10) Methylene chloride	4.15	84	73501	10.52	ug/L	96
11) MTBE	4.48	73	100477	12.07	ug/L	95
12) T-1,2-dichloroethene	4.50	96	85020	10.16	ug/L	95
13) 1,1-Dichloroethane	5.05	63	180828	10.54	ug/L	99
14) 2,2-Dichloropropane	5.83	77	102464	15.11	ug/L #	1
15) Cis-1,2-dichloroethene	5.82	96	85789	10.46	ug/L	89
16) Bromochloromethane	6.17	128	27302	10.21	ug/L #	77
17) Chloroform	6.33	83	124834	10.10	ug/L	93
18) 1,1,1-Trichloroethane	6.53	97	109656	11.72	ug/L #	78
19) 1,1-Dichloropropene	6.72	75	116536	10.14	ug/L	98
20) Carbon tetrachloride	6.71	119	77032	12.04	ug/L #	71
22) 1,2-Dichloroethane	7.00	62	70301	10.30	ug/L #	84
23) Benzene	6.94	78	348744	10.48	ug/L #	17
25) Trichloroethene	7.60	130	89913	9.88	ug/L	93
26) 1,2-Dichloropropane	7.83	63	97205	10.36	ug/L #	94
27) Dibromomethane	7.91	93	25725	10.65	ug/L #	76
28) Bromodichloromethane	8.05	83	73643	10.96	ug/L	99
29) 2-ceve	8.27	63	104717	43.90	ug/L #	75
30) Cis-1,3-dichloropropene	8.40	75	92090	11.19	ug/L #	82
32) Toluene	8.65	92	234614	10.35	ug/L	89
33) Trans-1,3-dichloropropene	8.82	75	61028	12.36	ug/L	97
34) 1,1,2-Trichloroethane	8.96	97	40551	10.91	ug/L	91
35) Tetrachloroethene (PCE)	9.03	166	86256	10.34	ug/L	90
36) 1,3-Dichloropropane	9.08	76	62221	10.30	ug/L	87
37) Dibromochloromethane	9.24	129	37739	10.50	ug/L #	78
38) 1,2-Dibromoethane	9.32	107	34074	10.91	ug/L #	67
40) Chlorobenzene	9.64	112	223358	10.12	ug/L	94
41) 1,1,1,2-Tetrachloroethane	9.69	131	55627	11.02	ug/L #	72
42) Ethylbenzene	9.69	106	136417	10.36	ug/L	99
43) P+m-Xylene	9.77	106	342735	21.77	ug/L	97
44) O-Xylene	10.01	106	159918	11.03	ug/L	90
45) Styrene	10.02	104	239018	10.79	ug/L	94
46) Bromoform	10.15	173	15682	11.19	ug/L #	100
47) Isopropylbenzene	10.23	105	416077	11.04	ug/L	94
48) 1,1,2,2-Tetrachloroethane	10.41	83	35710	9.83	ug/L	90
50) 1,2,3-Trichloropropene	10.45	110	7290	8.79	ug/L #	100
51) n-propylbenzene	10.48	91	526001	10.88	ug/L	96

(#) = qualifier out of range (m) = manual integration
 20JUL06.D 82605.M Thu Jul 20 10:19:54 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL06.D Vial: 6
 Acq On : 20 Jul 2017 9:42 am Operator: MGC
 Sample : 1712752-CAL3 Inst : MS-V5
 Misc : 1 VO-109-70509;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 9:56 2017

Quant Results File: 82605.RES

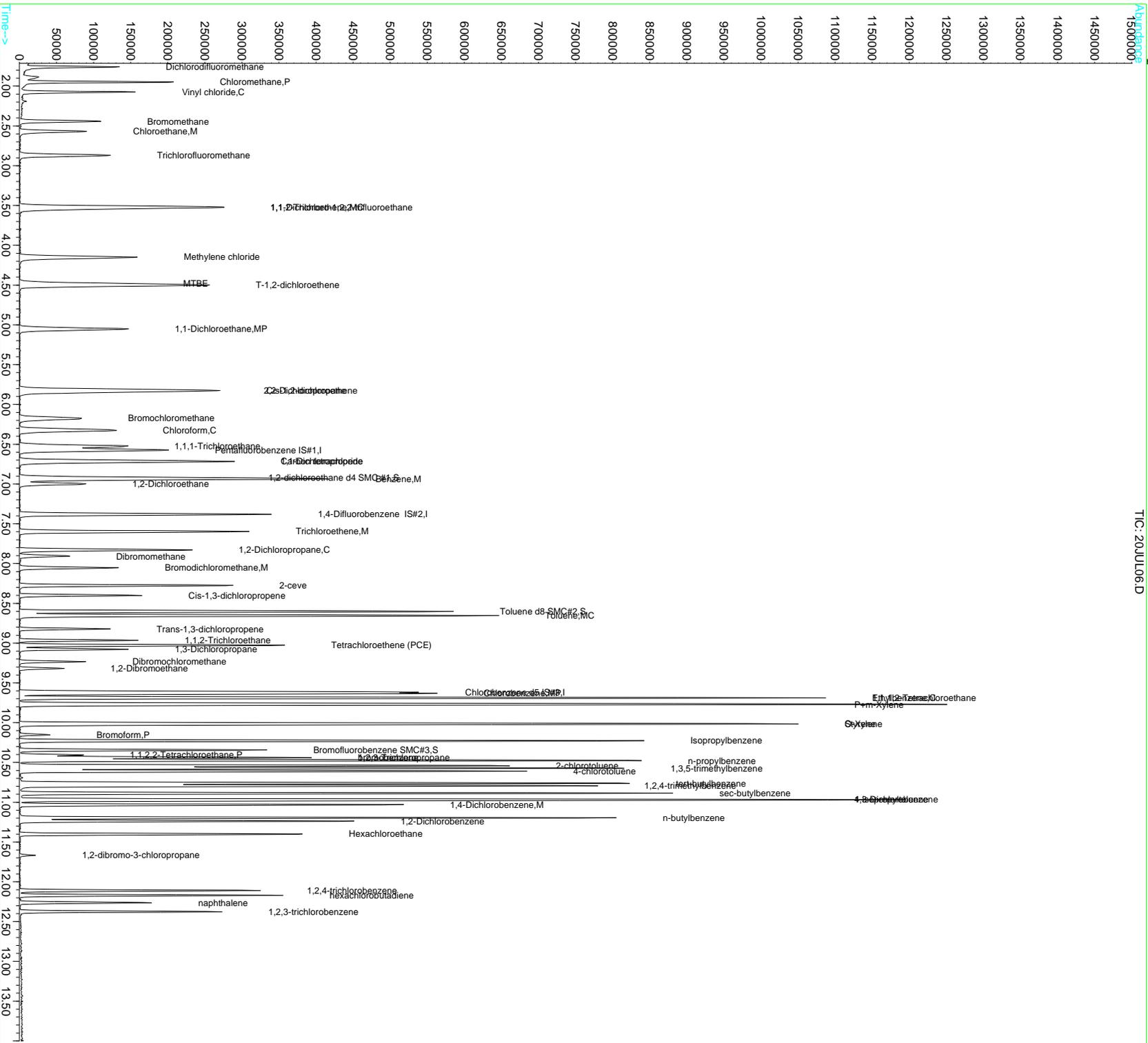
Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	77430	10.19	ug/L	92
53) 1,3,5-trimethylbenzene	10.57	105	346993	11.13	ug/L	98
54) 2-chlorotoluene	10.54	91	333425	10.98	ug/L	97
55) 4-chlorotoluene	10.61	91	306897	10.82	ug/L	91
56) tert-butylbenzene	10.76	119	322495	10.13	ug/L	95
57) 1,2,4-trimethylbenzene	10.79	105	335852	11.03	ug/L	99
58) sec-butylbenzene	10.89	105	468278	11.21	ug/L	98
59) 4-isopropyltoluene	10.97	119	378285	11.11	ug/L	98
60) 1,3-Dichlorobenzene	10.97	146	178686	10.59	ug/L	92
61) 1,4-Dichlorobenzene	11.03	146	170376	10.17	ug/L	95
62) n-butylbenzene	11.19	91	345036	10.94	ug/L	99
63) 1,2-Dichlorobenzene	11.23	146	148352	10.47	ug/L	97
64) Hexachloroethane	11.40	117	44652	12.34	ug/L #	1
65) 1,2-dibromo-3-chloropropan	11.66	75	4603	12.55	ug/L #	100
66) 1,2,4-trichlorobenzene	12.11	180	81142	10.87	ug/L	96
67) hexachlorobutadiene	12.17	225	56205	10.05	ug/L	85
68) naphthalene	12.26	128	107810	11.94	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	69823	12.11	ug/L	98

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL06.D
Acq On : 20 Jul 2017 9:42 am
Sample : 1712752-CAL3
Misc : 1 VO-109-70509;25ML
MS Integration Params: rteint.p
Quant Time: Jul 20 9:56 2017

Vial: 6
Operator: MGC
Inst: MS-V5
Multiplr: 1.00
Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Wed Jul 12 08:31:09 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL07.D
 Acq On : 20 Jul 2017 10:05 am
 Sample : 1712752-CAL4
 Misc : 1 VO-109-70510;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017

Vial: 7
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	187618	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	281102	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	72968	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	55567	9.89	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	98.90%
31) Toluene d8 SMC#2	8.60	98	350702	10.08	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.80%
49) Bromofluorobenzene SMC#3	10.34	95	110978	10.27	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	102.70%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	233707	22.55	ug/L	95
3) Chloromethane	1.95	50	397043	22.27	ug/L	96
4) Vinyl chloride	2.07	62	330883	22.69	ug/L	89
5) Bromomethane	2.44	94	180127	22.55	ug/L #	82
6) Chloroethane	2.56	64	220423	23.54	ug/L	91
7) Trichlorofluoromethane	2.87	101	282193	21.68	ug/L #	72
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	196960	23.49	ug/L	84
9) 1,1-Dichloroethene	3.51	61	361355	22.61	ug/L	97
10) Methylene chloride	4.15	84	189832	23.17	ug/L	96
11) MTBE	4.48	73	268374	27.51	ug/L	95
12) T-1,2-dichloroethene	4.50	96	220131	22.45	ug/L	95
13) 1,1-Dichloroethane	5.05	63	474319	23.59	ug/L	100
14) 2,2-Dichloropropane	5.83	77	271108	30.80	ug/L #	1
15) Cis-1,2-dichloroethene	5.82	96	227870	23.70	ug/L	87
16) Bromochloromethane	6.18	128	72379	23.10	ug/L #	84
17) Chloroform	6.32	83	330492	22.81	ug/L	94
18) 1,1,1-Trichloroethane	6.53	97	295919	26.99	ug/L #	73
19) 1,1-Dichloropropene	6.71	75	298538	22.18	ug/L	97
20) Carbon tetrachloride	6.71	119	208396	26.04	ug/L #	68
22) 1,2-Dichloroethane	7.00	62	180628	22.58	ug/L #	84
23) Benzene	6.94	78	899294	23.06	ug/L #	13
25) Trichloroethene	7.60	130	235207	22.95	ug/L	94
26) 1,2-Dichloropropane	7.83	63	261395	24.72	ug/L #	93
27) Dibromomethane	7.91	93	63746	23.43	ug/L #	75
28) Bromodichloromethane	8.05	83	200332	26.46	ug/L	98
29) 2-ceve	8.27	63	274355	102.09	ug/L #	76
30) Cis-1,3-dichloropropene	8.40	75	254046	25.36	ug/L #	83
32) Toluene	8.65	92	598158	23.41	ug/L	89
33) Trans-1,3-dichloropropene	8.82	75	172658	27.30	ug/L	96
34) 1,1,2-Trichloroethane	8.96	97	106093	25.33	ug/L	92
35) Tetrachloroethene (PCE)	9.03	166	219320	23.35	ug/L	91
36) 1,3-Dichloropropane	9.08	76	171822	25.25	ug/L	89
37) Dibromochloromethane	9.24	129	109837	24.44	ug/L #	77
38) 1,2-Dibromoethane	9.32	107	87501	24.03	ug/L	74
40) Chlorobenzene	9.64	112	590580	24.23	ug/L	93
41) 1,1,1,2-Tetrachloroethane	9.69	131	157573	27.47	ug/L #	72
42) Ethylbenzene	9.69	106	352215	24.23	ug/L	98
43) P+m-Xylene	9.77	106	860494	49.52	ug/L	95
44) O-Xylene	10.01	106	412366	25.76	ug/L	89
45) Styrene	10.02	104	624390	25.53	ug/L	94
46) Bromoform	10.15	173	46962	25.84	ug/L #	100
47) Isopropylbenzene	10.23	105	1059489	25.47	ug/L	93
48) 1,1,2,2-Tetrachloroethane	10.41	83	103328	25.76	ug/L	92
50) 1,2,3-Trichloropropene	10.45	110	23022	25.64	ug/L #	100
51) n-propylbenzene	10.48	91	1289258	24.16	ug/L	98

(#) = qualifier out of range (m) = manual integration
 20JUL07.D 82605.M Thu Jul 20 10:20:27 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL07.D Vial: 7
 Acq On : 20 Jul 2017 10:05 am Operator: MGC
 Sample : 1712752-CAL4 Inst : MS-V5
 Misc : 1 VO-109-70510;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

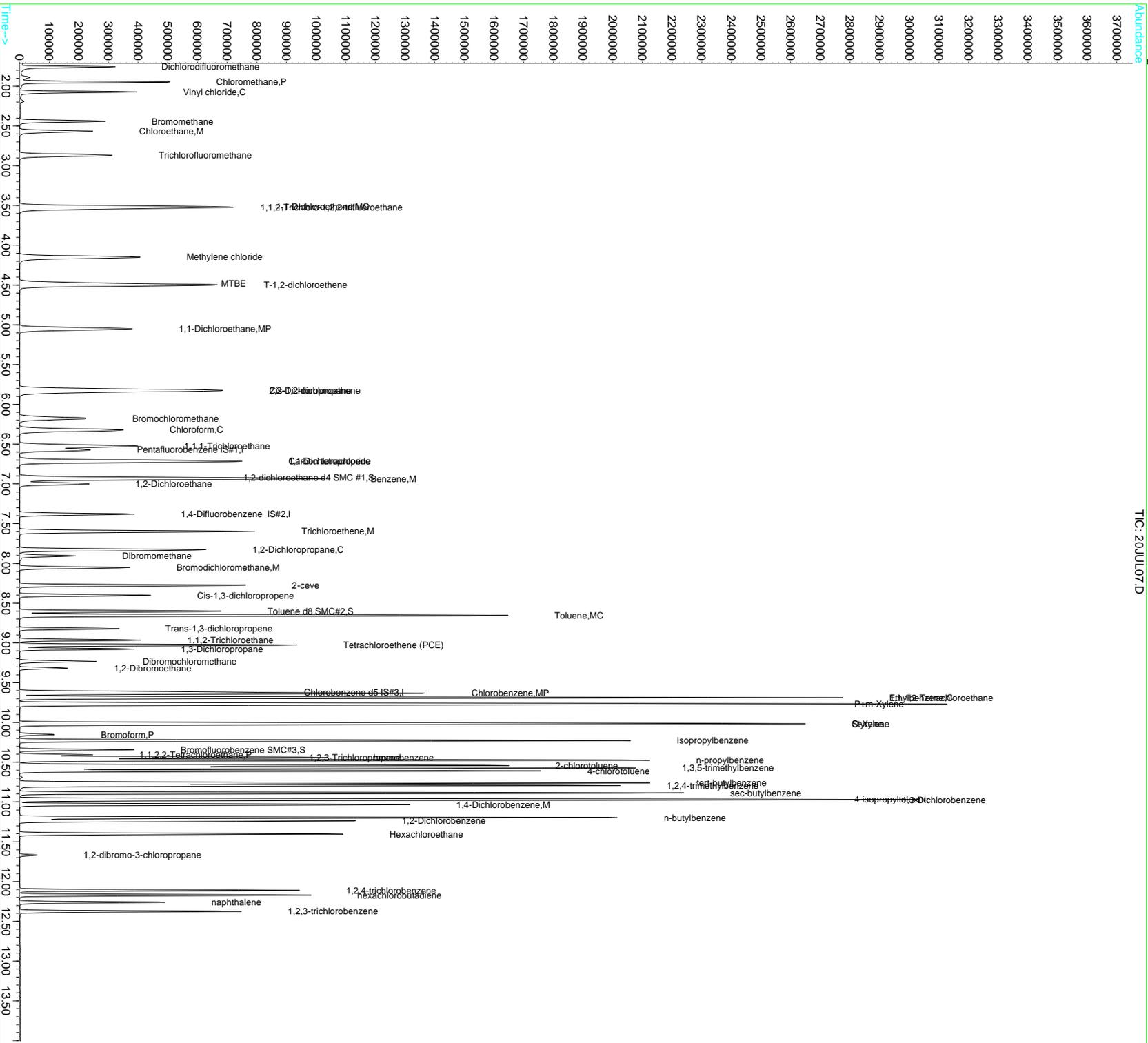
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	208206	24.82	ug/L	88
53) 1,3,5-trimethylbenzene	10.57	105	881972	25.63	ug/L	98
54) 2-chlorotoluene	10.54	91	849225	25.34	ug/L	97
55) 4-chlorotoluene	10.61	91	776277	24.79	ug/L	90
56) tert-butylbenzene	10.76	119	911734	25.94	ug/L	89
57) 1,2,4-trimethylbenzene	10.79	105	846058	25.17	ug/L	97
58) sec-butylbenzene	10.89	105	1197671	25.96	ug/L	99
59) 4-isopropyltoluene	10.97	119	962264	25.59	ug/L	98
60) 1,3-Dichlorobenzene	10.98	146	457160	24.54	ug/L	94
61) 1,4-Dichlorobenzene	11.03	146	450868	24.37	ug/L	96
62) n-butylbenzene	11.20	91	877934	25.21	ug/L	98
63) 1,2-Dichlorobenzene	11.24	146	388191	24.82	ug/L	97
64) Hexachloroethane	11.40	117	142974	28.86	ug/L #	1
65) 1,2-dibromo-3-chloropropan	11.67	75	14154	28.88	ug/L #	100
66) 1,2,4-trichlorobenzene	12.11	180	228207	27.70	ug/L	96
67) hexachlorobutadiene	12.17	225	156478	25.35	ug/L	82
68) naphthalene	12.26	128	294245	29.51	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	186210	29.25	ug/L	95

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL07.D
Acq On : 20 Jul 2017 10:05 am
Sample : 1712752-CAL4
Misc : 1 VO-109-70510;25ML
MS Integration Params: rteint.p
Quant Time: Jul 20 10:19 2017

Vial: 7
Operator: MGC
Inst: MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Wed Jul 12 08:31:09 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL08.D
 Acq On : 20 Jul 2017 10:28 am
 Sample : 1712752-CAL5
 Misc : 1 VO-109-70511;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:42 2017

Vial: 8
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	185328	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	283937	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	75612	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	52177	9.40	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	94.00%
31) Toluene d8 SMC#2	8.60	98	352702	10.04	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.40%
49) Bromofluorobenzene SMC#3	10.34	95	113132	10.10	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.00%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	489050	47.78	ug/L	95
3) Chloromethane	1.95	50	811231	46.07	ug/L	96
4) Vinyl chloride	2.07	62	680952	47.28	ug/L	90
5) Bromomethane	2.44	94	383525	48.08	ug/L #	81
6) Chloroethane	2.57	64	450541	48.70	ug/L	91
7) Trichlorofluoromethane	2.87	101	583179	45.35	ug/L #	72
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	406766	49.12	ug/L	82
9) 1,1-Dichloroethene	3.51	61	746260	47.28	ug/L	98
10) Methylene chloride	4.15	84	382650	47.29	ug/L	97
11) MTBE	4.48	73	565037	58.65	ug/L	96
12) T-1,2-dichloroethene	4.50	96	456593	47.14	ug/L	94
13) 1,1-Dichloroethane	5.05	63	985020	49.59	ug/L	99
14) 2,2-Dichloropropane	5.83	77	578292	63.44	ug/L #	1
15) Cis-1,2-dichloroethene	5.82	96	470220	49.51	ug/L	87
16) Bromochloromethane	6.17	128	150553	48.65	ug/L #	84
17) Chloroform	6.32	83	686790	47.99	ug/L	94
18) 1,1,1-Trichloroethane	6.53	97	626987	57.90	ug/L #	71
19) 1,1-Dichloropropene	6.72	75	627972	47.22	ug/L	98
20) Carbon tetrachloride	6.71	119	445807	54.82	ug/L #	65
22) 1,2-Dichloroethane	7.00	62	371453	47.00	ug/L #	85
23) Benzene	6.94	78	1825949	47.40	ug/L #	12
25) Trichloroethene	7.60	130	495793	47.88	ug/L	95
26) 1,2-Dichloropropane	7.83	63	539026	50.47	ug/L #	93
27) Dibromomethane	7.90	93	138763	50.50	ug/L #	76
28) Bromodichloromethane	8.05	83	423668	55.40	ug/L	98
29) 2-ceve	8.27	63	573300	211.21	ug/L #	75
30) Cis-1,3-dichloropropene	8.40	75	542482	52.04	ug/L #	84
32) Toluene	8.65	92	1203883	46.65	ug/L	92
33) Trans-1,3-dichloropropene	8.82	75	369933	55.15	ug/L	99
34) 1,1,2-Trichloroethane	8.96	97	215153	50.87	ug/L	92
35) Tetrachloroethene (PCE)	9.03	166	458944	48.37	ug/L	91
36) 1,3-Dichloropropane	9.08	76	359418	52.30	ug/L	89
37) Dibromochloromethane	9.23	129	236453	50.18	ug/L #	79
38) 1,2-Dibromoethane	9.32	107	185626	49.73	ug/L	73
40) Chlorobenzene	9.64	112	1199627	47.50	ug/L	94
41) 1,1,1,2-Tetrachloroethane	9.69	131	335607	55.90	ug/L	74
42) Ethylbenzene	9.69	106	728758	48.38	ug/L	88
43) P+m-Xylene	9.77	106	1720122	95.52	ug/L	88
44) O-Xylene	10.01	106	820982	49.50	ug/L	89
45) Styrene	10.02	104	1265285	49.93	ug/L	94
46) Bromoform	10.15	173	103405	51.93	ug/L #	100
47) Isopropylbenzene	10.23	105	2058135	47.75	ug/L	91
48) 1,1,2,2-Tetrachloroethane	10.40	83	209018	50.28	ug/L	88
50) 1,2,3-Trichloropropene	10.45	110	46293	49.99	ug/L #	100
51) n-propylbenzene	10.48	91	2486908	44.98	ug/L	97

(#) = qualifier out of range (m) = manual integration
 20JUL08.D 82605.M Thu Jul 20 11:16:20 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL08.D Vial: 8
 Acq On : 20 Jul 2017 10:28 am Operator: MGC
 Sample : 1712752-CAL5 Inst : MS-V5
 Misc : 1 VO-109-70511;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:42 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

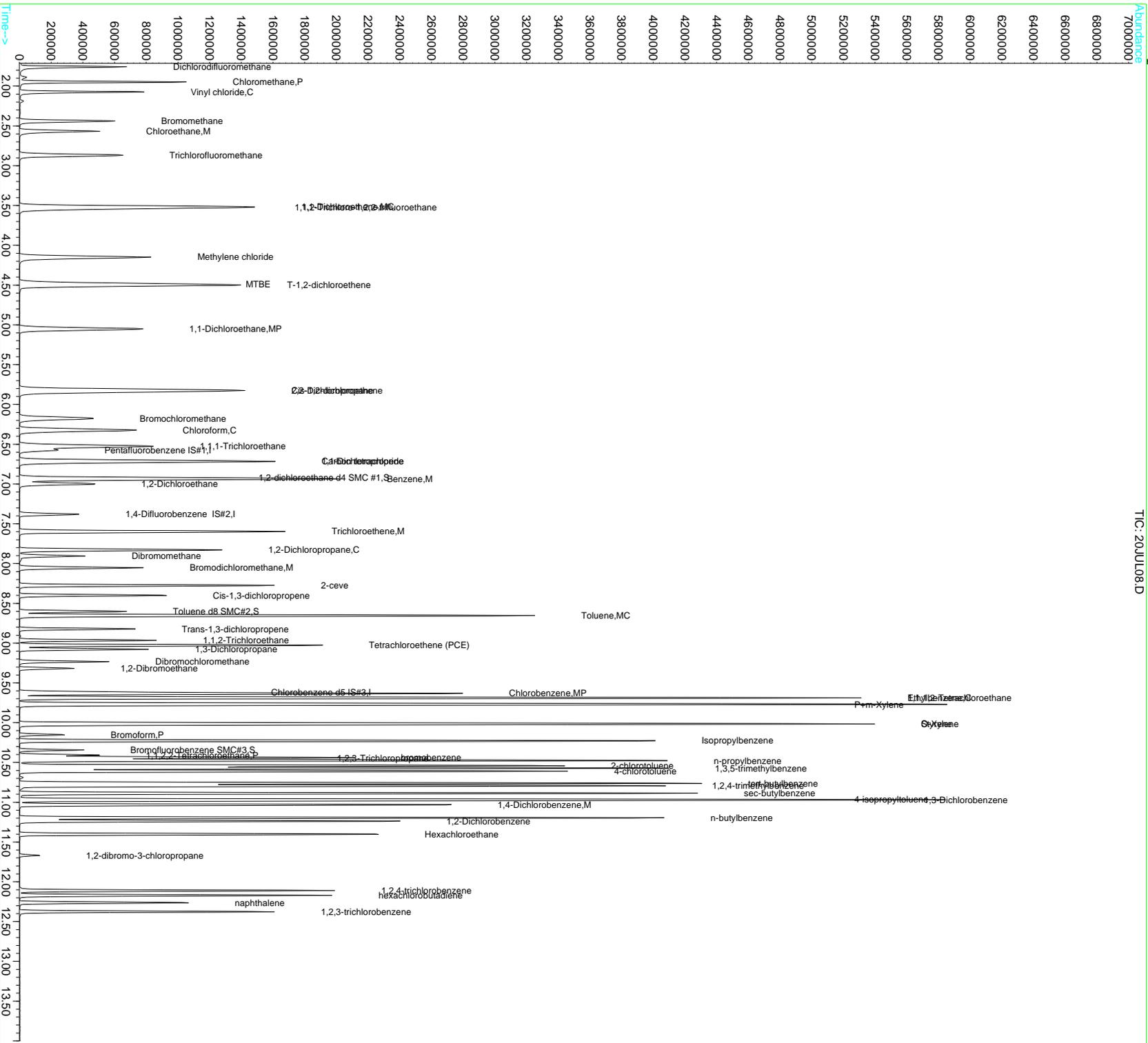
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	431566	49.65	ug/L	87
53) 1,3,5-trimethylbenzene	10.57	105	1748994	49.05	ug/L	96
54) 2-chlorotoluene	10.54	91	1732739	49.90	ug/L	94
55) 4-chlorotoluene	10.61	91	1522073	46.91	ug/L	86
56) tert-butylbenzene	10.76	119	1651439	45.35	ug/L	96
57) 1,2,4-trimethylbenzene	10.79	105	1707838	49.03	ug/L	94
58) sec-butylbenzene	10.89	105	2289268	47.89	ug/L	95
59) 4-isopropyltoluene	10.97	119	1837385	47.16	ug/L	96
60) 1,3-Dichlorobenzene	10.98	146	927038	48.02	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	927481	48.39	ug/L	95
62) n-butylbenzene	11.19	91	1757111	48.70	ug/L	96
63) 1,2-Dichlorobenzene	11.24	146	816300	50.36	ug/L	95
64) Hexachloroethane	11.40	117	338530	61.25	ug/L #	1
65) 1,2-dibromo-3-chloropropan	11.66	75	28130	52.27	ug/L #	100
66) 1,2,4-trichlorobenzene	12.11	180	488995	57.27	ug/L	94
67) hexachlorobutadiene	12.17	225	330304	51.64	ug/L	81
68) naphthalene	12.26	128	645395	62.47	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	404558	61.33	ug/L	95

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL08.D
Acq On : 20 Jul 2017 10:28 am
Sample : 1712752-CAL5
Misc : 1 VO-109-70511;25ML
MS Integration Params: rteint.p
Quant Time: Jul 20 10:42 2017

Vial: 8
Operator: MGC
Inst: MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Wed Jul 12 08:31:09 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL09.D
 Acq On : 20 Jul 2017 10:51 am
 Sample : 1712752-CAL6
 Misc : 1 VO-109-70512;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 11:17 2017

Vial: 9
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	190235	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	291095	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	79131	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	52606	9.24	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	92.40%
31) Toluene d8 SMC#2	8.60	98	361125	10.02	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.20%
49) Bromofluorobenzene SMC#3	10.35	95	119244	10.17	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.70%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	968491	92.18	ug/L	94
3) Chloromethane	1.95	50	1582330	87.55	ug/L	95
4) Vinyl chloride	2.07	62	1339863	90.62	ug/L	90
5) Bromomethane	2.43	94	784813	95.38	ug/L #	82
6) Chloroethane	2.56	64	904760	95.28	ug/L	91
7) Trichlorofluoromethane	2.86	101	1169918	88.63	ug/L #	72
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	827800	97.39	ug/L	82
9) 1,1-Dichloroethene	3.51	61	1454487	89.77	ug/L	96
10) Methylene chloride	4.15	84	782570	94.22	ug/L	99
11) MTBE	4.48	73	1135341	114.80	ug/L	96
12) T-1,2-dichloroethene	4.50	96	923699	92.92	ug/L	91
13) 1,1-Dichloroethane	5.05	63	1917451	94.05	ug/L	99
14) 2,2-Dichloropropane	5.83	77	1166561	122.13	ug/L #	1
15) Cis-1,2-dichloroethene	5.82	96	959200	98.40	ug/L	85
16) Bromochloromethane	6.18	128	311515	98.07	ug/L #	90
17) Chloroform	6.32	83	1363741	92.83	ug/L	92
18) 1,1,1-Trichloroethane	6.52	97	1261866	113.52	ug/L #	70
19) 1,1-Dichloropropene	6.72	75	1237502	90.66	ug/L	97
20) Carbon tetrachloride	6.71	119	903203	106.90	ug/L #	66
22) 1,2-Dichloroethane	7.00	62	735383	90.65	ug/L #	86
23) Benzene	6.94	78	3475353	87.89	ug/L #	12
25) Trichloroethene	7.60	130	1001087	94.31	ug/L	95
26) 1,2-Dichloropropane	7.83	63	1075561	98.23	ug/L #	92
27) Dibromomethane	7.90	93	286571	101.73	ug/L #	76
28) Bromodichloromethane	8.05	83	869037	110.85	ug/L	98
29) 2-ceve	8.28	63	1143478	410.90	ug/L #	74
30) Cis-1,3-dichloropropene	8.40	75	1103839	101.90	ug/L #	84
32) Toluene	8.65	92	2287718	86.47	ug/L	98
33) Trans-1,3-dichloropropene	8.82	75	767736	109.12	ug/L	99
34) 1,1,2-Trichloroethane	8.97	97	446863	103.05	ug/L	92
35) Tetrachloroethene (PCE)	9.03	166	916653	94.22	ug/L	91
36) 1,3-Dichloropropane	9.07	76	715185	101.51	ug/L	88
37) Dibromochloromethane	9.23	129	501363	101.99	ug/L #	78
38) 1,2-Dibromoethane	9.32	107	385684	100.11	ug/L	73
40) Chlorobenzene	9.63	112	2281077	86.31	ug/L	93
41) 1,1,1,2-Tetrachloroethane	9.69	131	644759	102.17	ug/L #	71
42) Ethylbenzene	9.69	106	1369792	86.89	ug/L	71
43) P+m-Xylene	9.77	106	3044741	161.56	ug/L	75
44) O-Xylene	10.01	106	1555446	89.61	ug/L	81
45) Styrene	10.02	104	2310367	87.11	ug/L	94
46) Bromoform	10.15	173	232645	108.61	ug/L #	100
47) Isopropylbenzene	10.23	105	3519654	78.02	ug/L #	81
48) 1,1,2,2-Tetrachloroethane	10.41	83	442065	101.62	ug/L	90
50) 1,2,3-Trichloropropene	10.45	110	99524	102.96	ug/L #	100
51) n-propylbenzene	10.47	91	3994962	69.05	ug/L	86

(#) = qualifier out of range (m) = manual integration
 20JUL09.D 82605.M Thu Jul 20 11:17:22 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL09.D Vial: 9
 Acq On : 20 Jul 2017 10:51 am Operator: MGC
 Sample : 1712752-CAL6 Inst : MS-V5
 Misc : 1 VO-109-70512;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 11:17 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

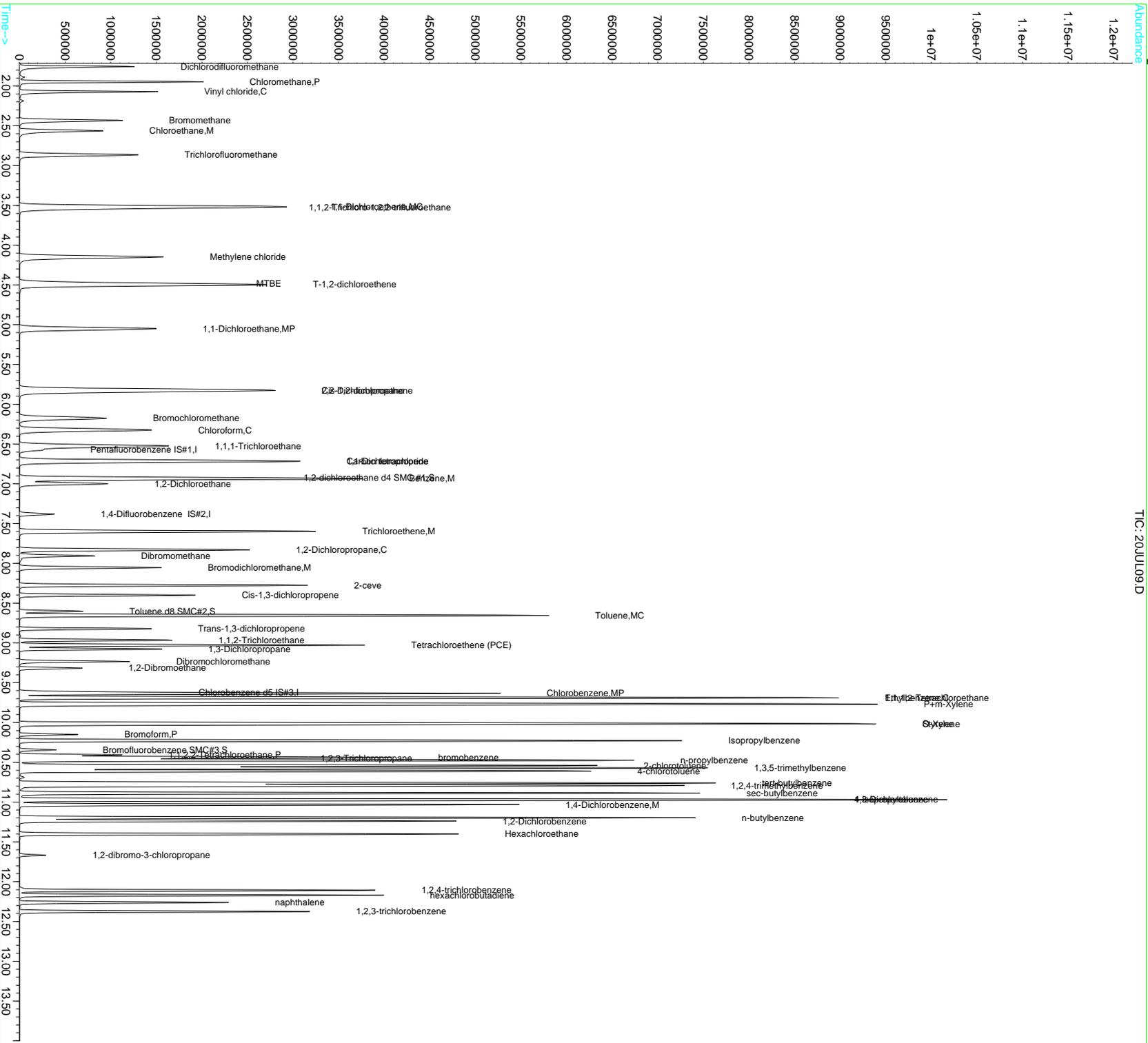
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	883596	97.12	ug/L	86
53) 1,3,5-trimethylbenzene	10.57	105	3042409	81.53	ug/L	88
54) 2-chlorotoluene	10.54	91	3108517	85.54	ug/L	88
55) 4-chlorotoluene	10.61	91	2812921m	82.84	ug/L	
56) tert-butylbenzene	10.76	119	3375108	88.55	ug/L	90
57) 1,2,4-trimethylbenzene	10.79	105	3034120	83.23	ug/L	88
58) sec-butylbenzene	10.89	105	3766201	75.29	ug/L #	84
59) 4-isopropyltoluene	10.97	119	3123617	76.61	ug/L	90
60) 1,3-Dichlorobenzene	10.98	146	1743457	86.30	ug/L	92
61) 1,4-Dichlorobenzene	11.03	146	1807605	90.11	ug/L	96
62) n-butylbenzene	11.20	91	3076408	81.47	ug/L #	89
63) 1,2-Dichlorobenzene	11.24	146	1598367	94.22	ug/L	96
64) Hexachloroethane	11.40	117	733609	122.92	ug/L #	1
65) 1,2-dibromo-3-chloropropan	11.67	75	63145	108.23	ug/L #	100
66) 1,2,4-trichlorobenzene	12.11	180	1002881	112.23	ug/L	95
67) hexachlorobutadiene	12.17	225	656383	98.06	ug/L	83
68) naphthalene	12.26	128	1360035	125.78	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	828865	120.07	ug/L	94

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL09.D
Acq On : 20 Jul 2017 10:51 am
Sample : 1712752-CAL6
Misc : 1 VO-109-70512;25ML
MS Integration Params: rteint.p
Quant Time: Jul 20 11:17 2017

Vial: 9
Operator: MGC
Inst: MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Wed Jul 12 08:31:09 2017
Response via : Initial Calibration



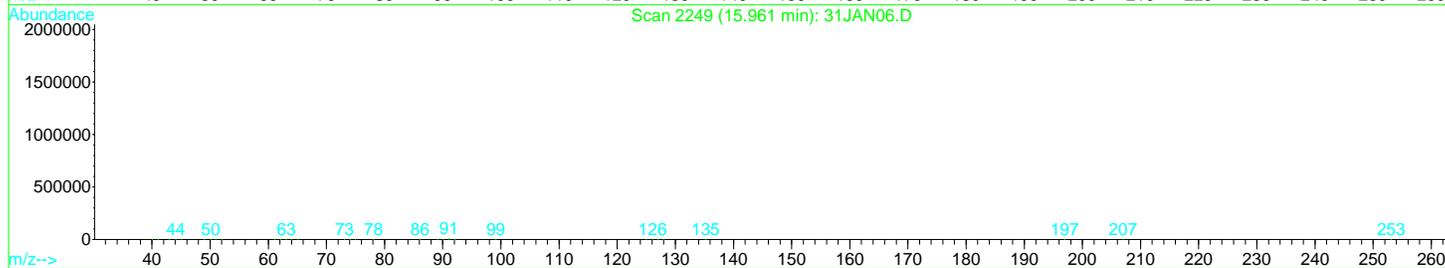
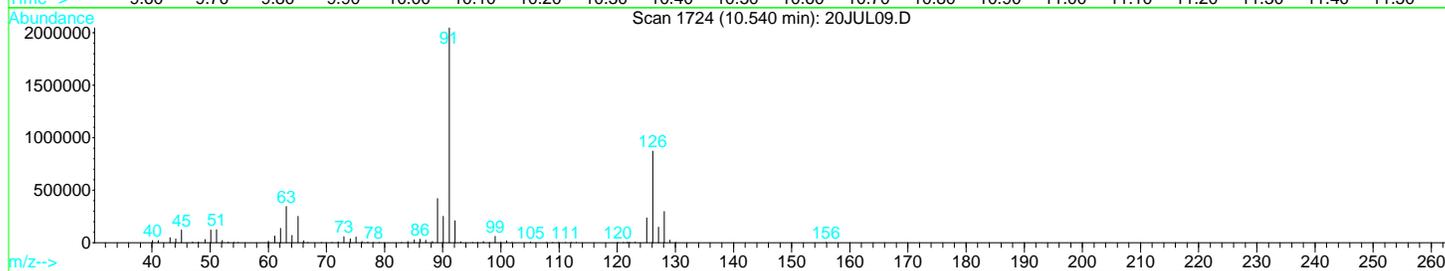
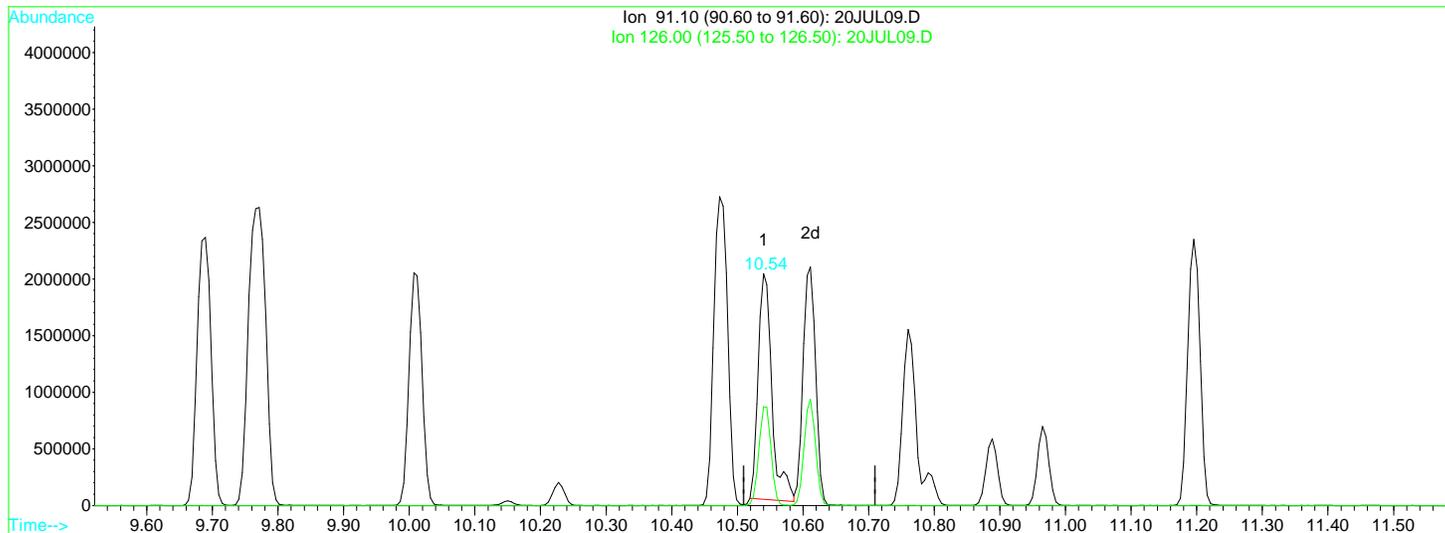
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL09.D
 Acq On : 20 Jul 2017 10:51 am
 Sample : 1712752-CAL6
 Misc : 1 VO-109-70512;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 11:05 2017

Vial: 9
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Multiple Level Calibration



TIC: 20JUL09.D

(55) 4-chlorotoluene

10.54min 85.95ug/L

response 2918491

Ion	Exp%	Act%
91.10	100	100
126.00	29.80	38.19
0.00	0.00	0.00
0.00	0.00	0.00

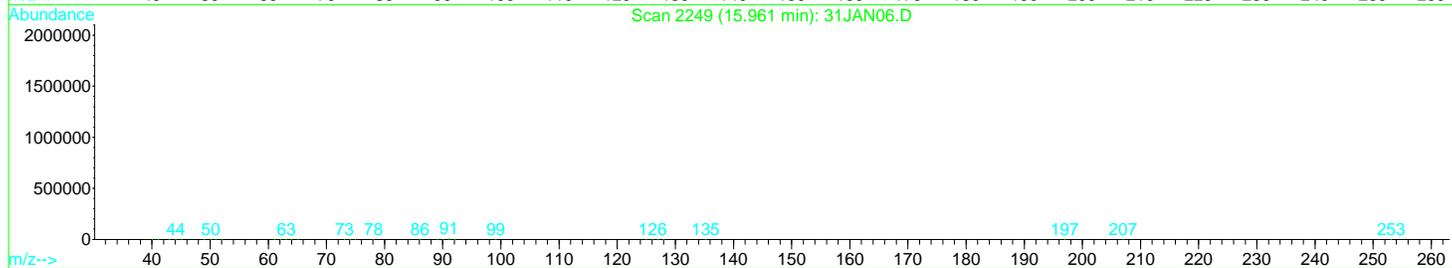
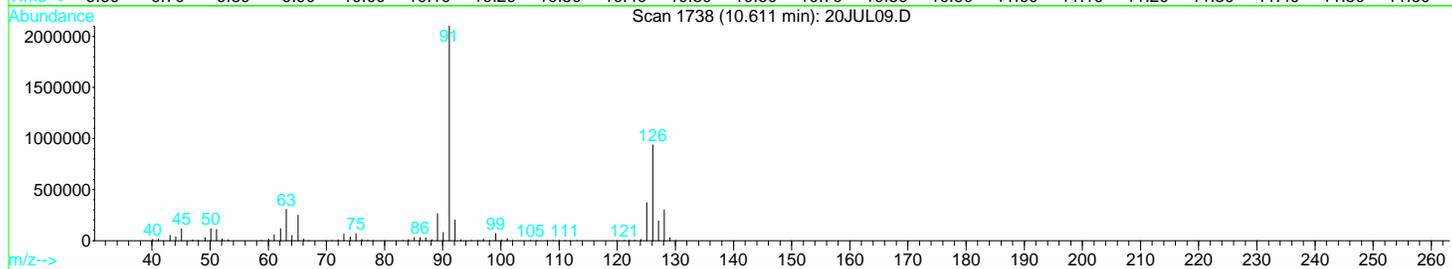
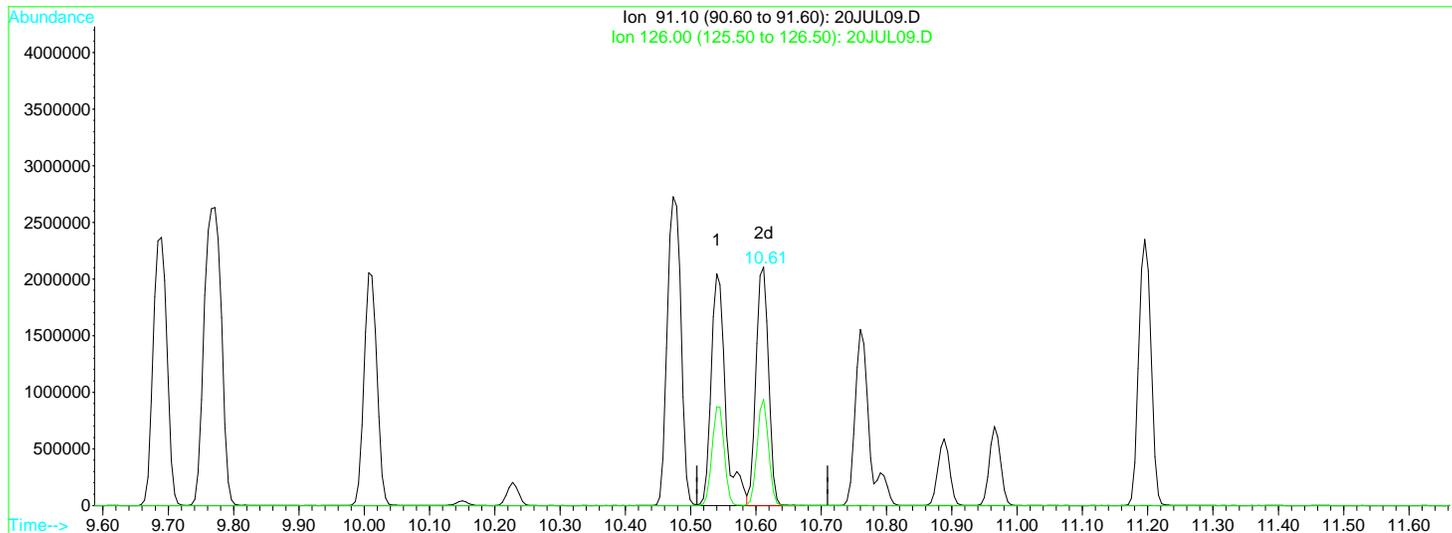
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL09.D
 Acq On : 20 Jul 2017 10:51 am
 Sample : 1712752-CAL6
 Misc : 1 VO-109-70512;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 11:17 2017

Vial: 9
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Multiple Level Calibration



TIC: 20JUL09.D

(55) 4-chlorotoluene

10.61min 82.84ug/L m

response 2812921

Ion	Exp%	Act%
91.10	100	100
126.00	29.80	39.63#
0.00	0.00	0.00
0.00	0.00	0.00

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL15.D Vial: 15
 Acq On : 20 Jul 2017 1:09 pm Operator: MGC
 Sample : 1712752-CAL7 Inst : MS-V5
 Misc : 1 VO-109-70524;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 13:52 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	185398	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	284772	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	74464	10.00	ug/L	0.00

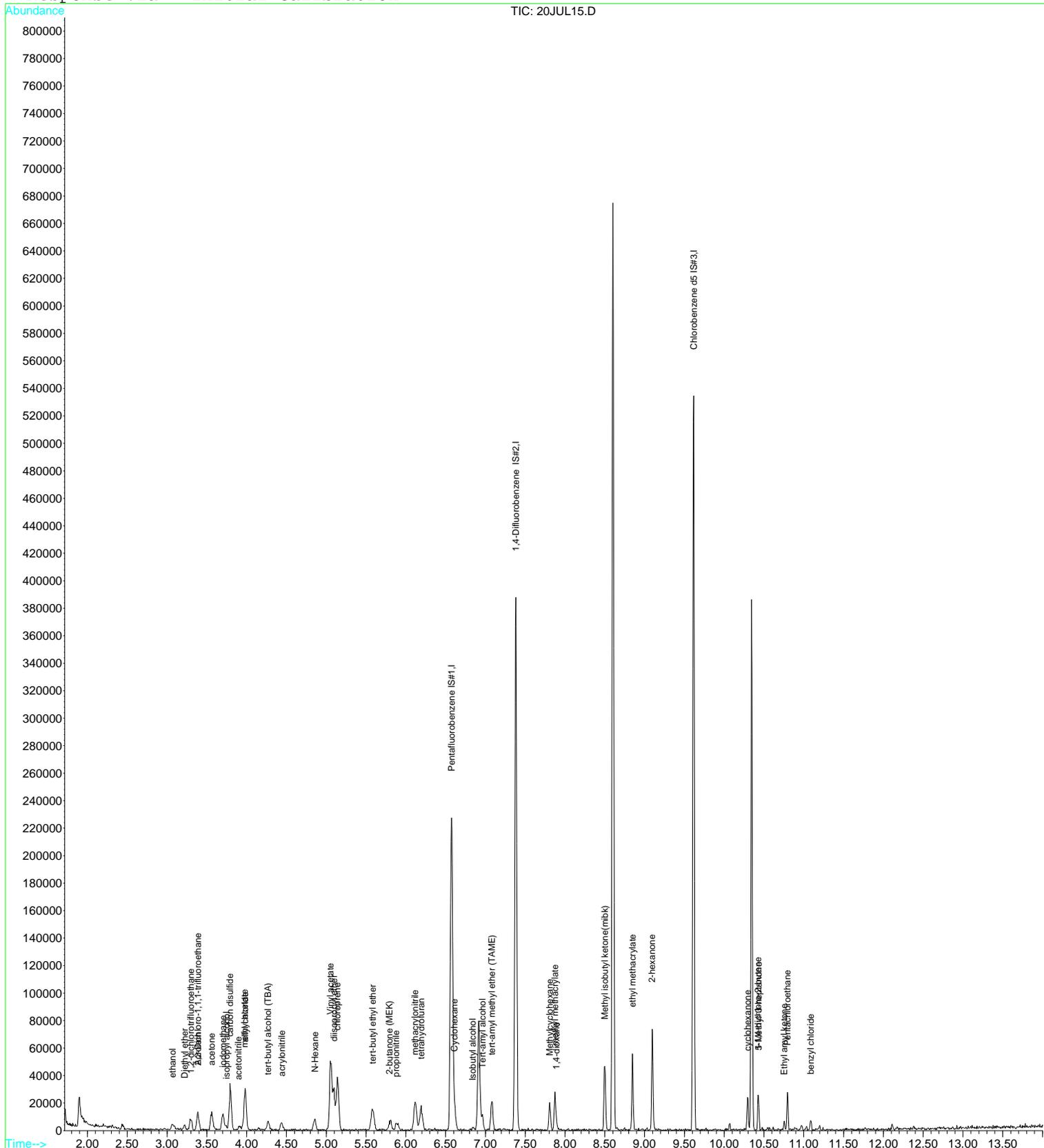
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.07	45	6669	237.41	ug/L #	74
3) 2,2-Dichloro-1,1,1-trifluo	3.39	83	8420	0.48	ug/L #	97
4) 1,2-dichlorotrifluoroethan	3.30	67	6359	0.54	ug/L	95
5) Diethyl ether	3.22	59	1957	0.40	ug/L	93
6) isopropyl alcohol	3.74	45	5048	38.17	ug/L #	61
7) Acrolein	3.39	56	3657	7.77	ug/L	90
8) acetone	3.56	43	17541	21.07	ug/L	96
9) tert-butyl alcohol (TBA)	4.27	59	8481	49.09	ug/L	100
10) acetonitrile	3.90	41	3998	10.33	ug/L #	17
11) methyl acetate	3.97	43	11350	4.98	ug/L	98
12) allyl chloride	3.98	41	31171	1.67	ug/L	99
13) iodomethane	3.70	142	15966	1.40	ug/L	99
14) acrylonitrile	4.44	53	5148	3.81	ug/L #	94
15) carbon disulfide	3.79	76	47833	1.70	ug/L	97
16) N-Hexane	4.86	57	4627	0.37	ug/L #	67
17) diisopropyl ether	5.10	87	6251	0.91	ug/L	97
18) Vinyl acetate	5.05	43	102573	11.40	ug/L	99
19) chloroprene	5.14	53	31785	1.57	ug/L	88
20) tert-butyl ethyl ether	5.59	59	20227	1.08	ug/L	93
21) 2-butanone (MEK)	5.79	43	12269	8.65	ug/L #	75
22) propionitrile	5.88	54	8801	18.19	ug/L #	93
23) Isobutyl alcohol	6.84	43	1703	58.05	ug/L #	72
24) methacrylonitrile	6.12	67	11704	9.39	ug/L	88
25) Tert-amyl alcohol	6.96	59	7446	338.59	ug/L #	66
26) tetrahydrofuran	6.19	42	16283	17.10	ug/L	95
27) Cyclohexane	6.61	56	13741	0.55	ug/L #	68
28) tert-amyl methyl ether (TA	7.09	73	11082	1.05	ug/L #	75
30) methyl methacrylate	7.87	69	9451	4.86	ug/L	99
31) Methylcyclohexane	7.80	55	7620	0.44	ug/L	89
32) 1,4-dioxane	7.89	88	2808	100.34	ug/L	84
33) Methyl isobutyl ketone(mib	8.50	43	29360	9.06	ug/L	96
34) ethyl methacrylate	8.85	69	21126	5.01	ug/L	94
35) 2-hexanone	9.09	43	40486	18.67	ug/L	98
37) 5-Methyl-3-heptanone	10.44	43	3036	0.90	ug/L #	81
38) cyclohexanone	10.29	55	9469	52.48	ug/L	93
39) t-1,4-dichloro-2-butene	10.43	75	2405	8.17	ug/L #	50
40) Ethyl amyl ketone	10.76	57	1285	0.43	ug/L #	89
41) Pentachloroethane	10.79	167	2461	2.44	ug/L	89
42) benzyl chloride	11.09	91	5221	4.23	ug/L #	57

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL15.D
Acq On : 20 Jul 2017 1:09 pm
Sample : 1712752-CAL7
Misc : 1 VO-109-70524;25ML
MS Integration Params: rteint.p
Quant Time: Jul 20 13:52 2017

Vial: 15
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Jul 11 13:50:19 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL17.D Vial: 17
 Acq On : 20 Jul 2017 1:55 pm Operator: MGC
 Sample : 1712752-CAL8 Inst : MS-V5
 Misc : 1 VO-109-70525;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 14:21 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	181609	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	282158	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	74489	10.00	ug/L	0.00

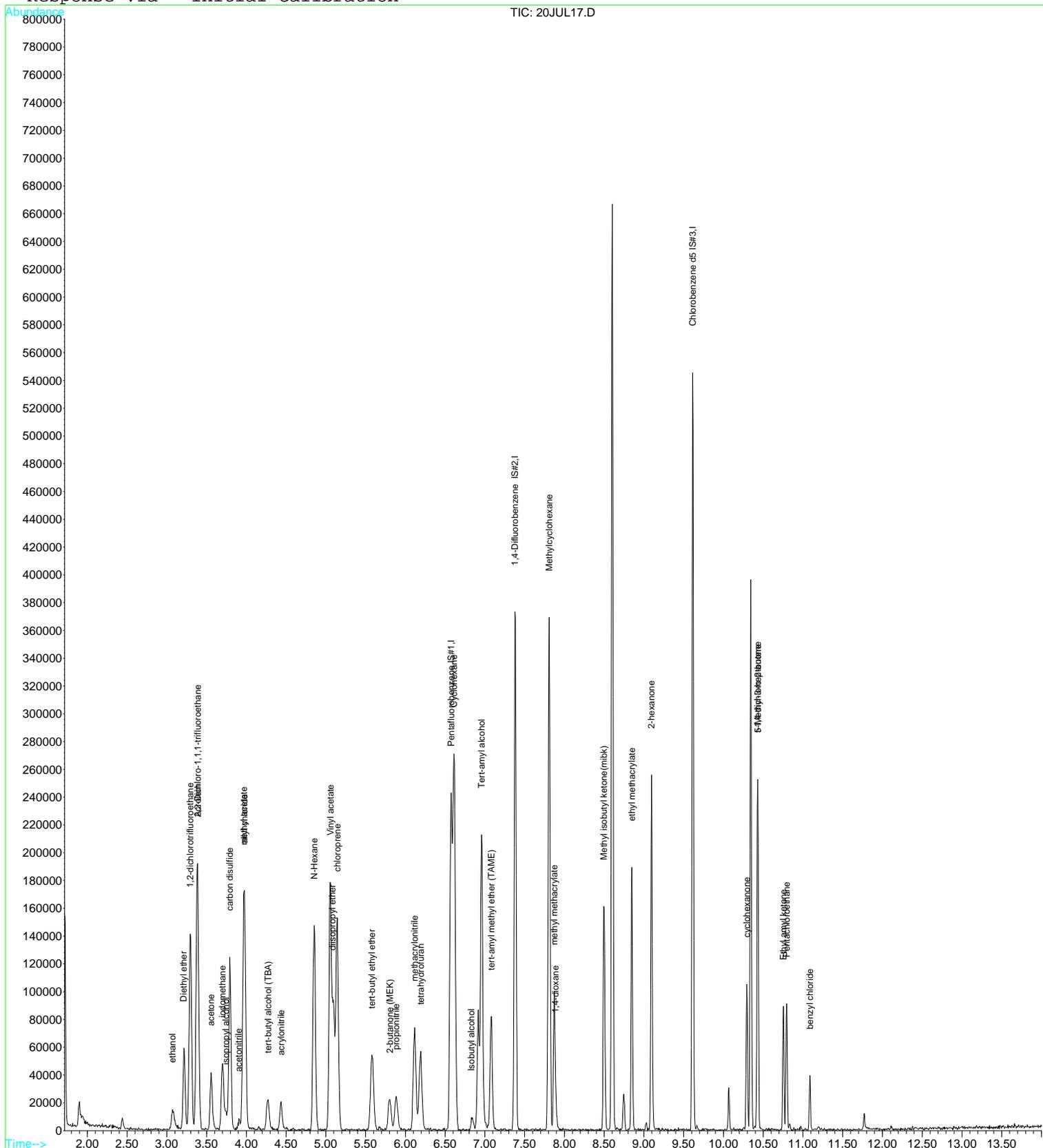
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.07	45	24231	880.61	ug/L #	42
3) 2,2-Dichloro-1,1,1-trifluo	3.39	83	139435	8.06	ug/L #	76
4) 1,2-dichlorotrifluoroethan	3.30	67	95716	8.30	ug/L #	85
5) Diethyl ether	3.22	59	36853	7.68	ug/L	85
6) isopropyl alcohol	3.74	45	24483	188.97	ug/L #	48
7) Acrolein	3.39	56	12111	26.26	ug/L #	57
8) acetone	3.56	43	53458	65.55	ug/L	93
9) tert-butyl alcohol (TBA)	4.27	59	35214	208.08	ug/L	100
10) acetonitrile	3.90	41	11392	30.06	ug/L	92
11) methyl acetate	3.97	43	183134	81.98	ug/L	94
12) allyl chloride	3.98	41	121027	6.64	ug/L	100
13) iodomethane	3.70	142	65253	5.82	ug/L	96
14) acrylonitrile	4.44	53	19247	14.55	ug/L	88
15) carbon disulfide	3.79	76	184809	6.70	ug/L	98
16) N-Hexane	4.85	57	93481	7.68	ug/L #	84
17) diisopropyl ether	5.09	87	21528	3.19	ug/L	96
18) Vinyl acetate	5.05	43	349748	39.68	ug/L	97
19) chloroprene	5.14	53	129340	6.52	ug/L	91
20) tert-butyl ethyl ether	5.59	59	72044	3.92	ug/L	96
21) 2-butanone (MEK)	5.80	43	44212	31.81	ug/L #	88
22) propionitrile	5.88	54	37744	79.64	ug/L #	91
23) Isobutyl alcohol	6.83	43	7785	131.68	ug/L #	76
24) methacrylonitrile	6.12	67	38110	31.21	ug/L	93
25) Tert-amyl alcohol	6.96	59	138382	1103.30	ug/L #	65
26) tetrahydrofuran	6.19	42	60102	64.44	ug/L	98
27) Cyclohexane	6.62	56	183532	7.51	ug/L #	74
28) tert-amyl methyl ether (TA	7.08	73	39088	3.77	ug/L	79
30) methyl methacrylate	7.88	69	32411	16.83	ug/L	88
31) Methylcyclohexane	7.81	55	138472	8.11	ug/L	92
32) 1,4-dioxane	7.89	88	10018	361.29	ug/L	96
33) Methyl isobutyl ketone(mib	8.50	43	101652	31.67	ug/L	96
34) ethyl methacrylate	8.85	69	75440	18.04	ug/L	95
35) 2-hexanone	9.09	43	138228	64.34	ug/L	99
37) 5-Methyl-3-heptanone	10.43	43	54948	16.26	ug/L	97
38) cyclohexanone	10.29	55	39500	218.83	ug/L	97
39) t-1,4-dichloro-2-butene	10.43	75	10413	28.03	ug/L #	41
40) Ethyl amyl ketone	10.75	57	22893	7.59	ug/L #	75
41) Pentachloroethane	10.79	167	9109	4.69	ug/L #	87
42) benzyl chloride	11.09	91	20812	11.38	ug/L #	55

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL17.D
Acq On : 20 Jul 2017 1:55 pm
Sample : 1712752-CAL8
Misc : 1 VO-109-70525;25ML
MS Integration Params: rteint.p
Quant Time: Jul 20 14:21 2017

Vial: 17
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Jul 11 13:50:19 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL18.D Vial: 18
 Acq On : 20 Jul 2017 2:18 pm Operator: MGC
 Sample : 1712752-CAL9 Inst : MS-V5
 Misc : 1 VO-109-70526;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:12 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	177625	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	272450	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	69283	10.00	ug/L	0.00

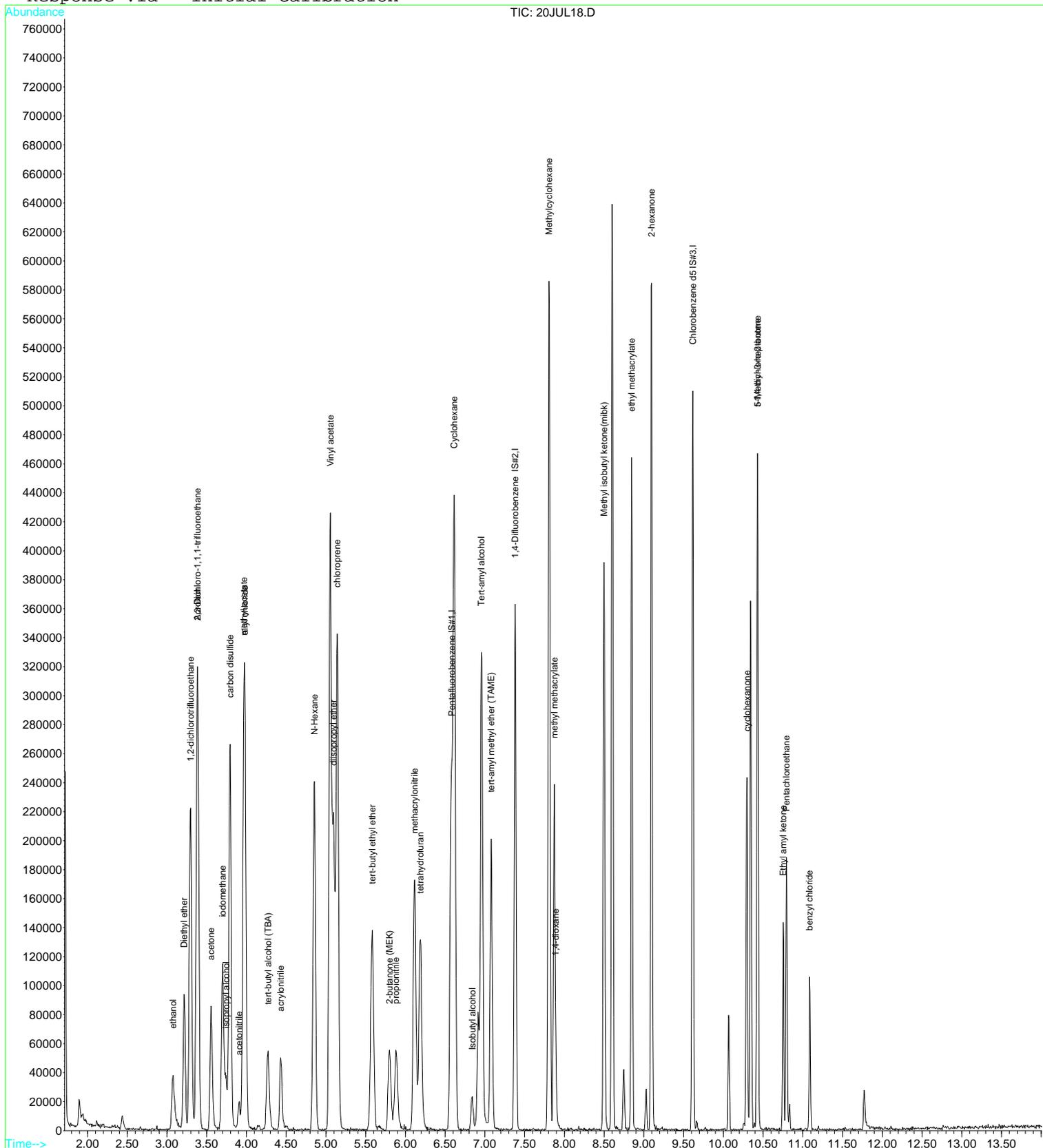
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.08	45	62213	2311.67	ug/L #	47
3) 2,2-Dichloro-1,1,1-trifluo	3.39	83	221656	13.09	ug/L #	75
4) 1,2-dichlorotrifluoroethan	3.30	67	150832	13.37	ug/L #	85
5) Diethyl ether	3.22	59	58599	12.49	ug/L	87
6) isopropyl alcohol	3.74	45	59618	470.49	ug/L #	44
7) Acrolein	3.39	56	30220	67.01	ug/L #	69
8) acetone	3.55	43	116631	146.21	ug/L	96
9) tert-butyl alcohol (TBA)	4.27	59	80745	487.83	ug/L	100
10) acetonitrile	3.91	41	27286	73.62	ug/L #	59
11) methyl acetate	3.96	43	288754	132.16	ug/L	94
12) allyl chloride	3.98	41	270178	15.15	ug/L	97
13) iodomethane	3.70	142	154713	14.12	ug/L	97
14) acrylonitrile	4.43	53	46773	36.15	ug/L	94
15) carbon disulfide	3.79	76	408149	15.12	ug/L	97
16) N-Hexane	4.86	57	150267	12.62	ug/L #	83
17) diisopropyl ether	5.10	87	52531	7.96	ug/L	91
18) Vinyl acetate	5.06	43	828062	96.05	ug/L	97
19) chloroprene	5.15	53	286537	14.77	ug/L	93
20) tert-butyl ethyl ether	5.58	59	170677	9.49	ug/L	96
21) 2-butanone (MEK)	5.80	43	102204	75.18	ug/L #	90
22) propionitrile	5.88	54	87903	189.63	ug/L #	90
23) Isobutyl alcohol	6.84	43	19916	283.09	ug/L #	71
24) methacrylonitrile	6.12	67	91400	76.53	ug/L	90
25) Tert-amyl alcohol	6.96	59	219925	1607.75	ug/L #	64
26) tetrahydrofuran	6.18	42	135022	148.01	ug/L	94
27) Cyclohexane	6.61	56	295091	12.35	ug/L #	72
28) tert-amyl methyl ether (TA	7.08	73	92322	9.10	ug/L #	76
30) methyl methacrylate	7.87	69	77276	41.56	ug/L	93
31) Methylcyclohexane	7.81	55	219815	13.33	ug/L	92
32) 1,4-dioxane	7.89	88	22981	858.33	ug/L	81
33) Methyl isobutyl ketone(mib	8.50	43	236406	76.27	ug/L	96
34) ethyl methacrylate	8.85	69	183288	45.39	ug/L	96
35) 2-hexanone	9.09	43	323658	156.02	ug/L	99
37) 5-Methyl-3-heptanone	10.43	43	87636	27.87	ug/L	96
38) cyclohexanone	10.30	55	94541	563.10	ug/L	95
39) t-1,4-dichloro-2-butene	10.43	75	25830	63.86	ug/L #	31
40) Ethyl amyl ketone	10.75	57	34434	12.27	ug/L #	78
41) Pentachloroethane	10.80	167	21823	9.53	ug/L	91
42) benzyl chloride	11.09	91	58763	26.60	ug/L #	58

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL18.D
 Acq On : 20 Jul 2017 2:18 pm
 Sample : 1712752-CAL9
 Misc : 1 VO-109-70526;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:12 2017

Vial: 18
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL19.D Vial: 19
 Acq On : 20 Jul 2017 2:41 pm Operator: MGC
 Sample : 1712752-CALA Inst : MS-V5
 Misc : 1 VO-109-70527;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:12 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	178179	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	269523	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	71971	10.00	ug/L	0.00

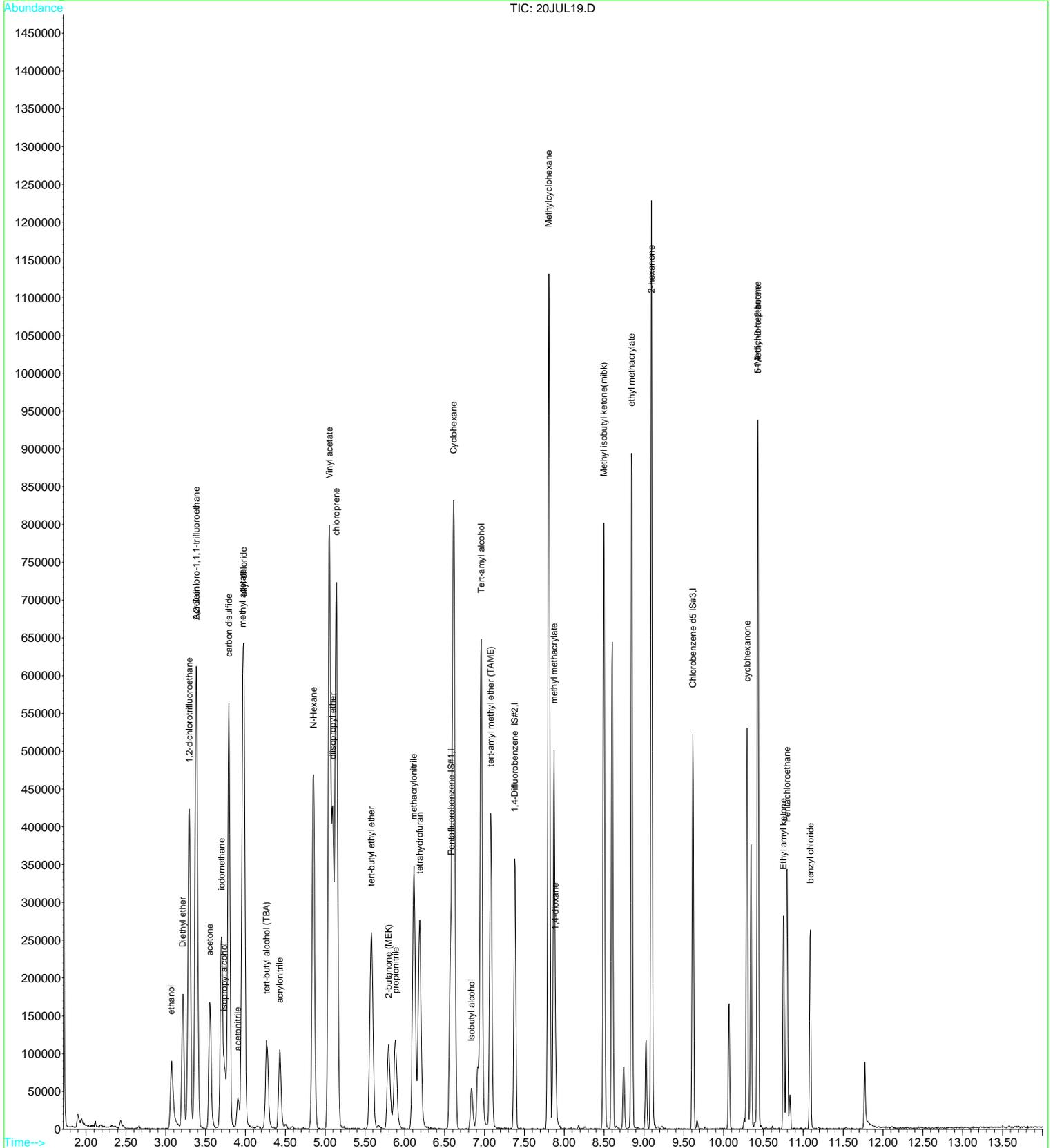
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.07	45	140530	5205.50	ug/L #	43
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	425124	25.03	ug/L #	73
4) 1,2-dichlorotrifluoroethan	3.30	67	284371	25.13	ug/L #	83
5) Diethyl ether	3.22	59	114106	24.25	ug/L	85
6) isopropyl alcohol	3.74	45	131474	1034.33	ug/L #	41
7) Acrolein	3.39	56	62901	139.04	ug/L #	73
8) acetone	3.55	43	229854	287.26	ug/L	94
9) tert-butyl alcohol (TBA)	4.26	59	175269	1055.61	ug/L	100
10) acetonitrile	3.91	41	61133	164.42	ug/L #	33
11) methyl acetate	3.96	43	550034	250.97	ug/L	95
12) allyl chloride	3.98	41	574268	32.11	ug/L	95
13) iodomethane	3.70	142	355621	32.35	ug/L	98
14) acrylonitrile	4.43	53	102774	79.19	ug/L	96
15) carbon disulfide	3.79	76	874992	32.31	ug/L	97
16) N-Hexane	4.85	57	297530	24.90	ug/L #	84
17) diisopropyl ether	5.09	87	103764	15.68	ug/L	93
18) Vinyl acetate	5.05	43	1587903	183.61	ug/L	96
19) chloroprene	5.14	53	611898	31.45	ug/L	93
20) tert-butyl ethyl ether	5.58	59	340727	18.89	ug/L	96
21) 2-butanone (MEK)	5.80	43	200206	146.82	ug/L #	86
22) propionitrile	5.88	54	183350	394.30	ug/L #	88
23) Isobutyl alcohol	6.84	43	44239	580.76	ug/L #	69
24) methacrylonitrile	6.12	67	186727	155.86	ug/L	88
25) Tert-amyl alcohol	6.95	59	433887	2875.85	ug/L #	63
26) tetrahydrofuran	6.19	42	274573	300.05	ug/L	94
27) Cyclohexane	6.61	56	564683	23.55	ug/L #	72
28) tert-amyl methyl ether (TA	7.08	73	186688	18.35	ug/L #	73
30) methyl methacrylate	7.87	69	158389	86.10	ug/L	90
31) Methylcyclohexane	7.80	55	420775	25.80	ug/L	93
32) 1,4-dioxane	7.89	88	52189	1970.40	ug/L	86
33) Methyl isobutyl ketone(mib	8.50	43	475097	154.94	ug/L	95
34) ethyl methacrylate	8.84	69	369893	92.59	ug/L	95
35) 2-hexanone	9.10	43	657561	320.43	ug/L	100
37) 5-Methyl-3-heptanone	10.43	43	167434	51.27	ug/L	94
38) cyclohexanone	10.29	55	198878	1140.31	ug/L	94
39) t-1,4-dichloro-2-butene	10.42	75	61347	121.43	ug/L #	27
40) Ethyl amyl ketone	10.75	57	72956	25.02	ug/L #	73
41) Pentachloroethane	10.80	167	40327	15.69	ug/L	92
42) benzyl chloride	11.09	91	145825	49.60	ug/L #	57

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL19.D
 Acq On : 20 Jul 2017 2:41 pm
 Sample : 1712752-CALA
 Misc : 1 VO-109-70527;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:12 2017

Vial: 19
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL20.D Vial: 20
 Acq On : 20 Jul 2017 3:04 pm Operator: MGC
 Sample : 1712752-CALB Inst : MS-V5
 Misc : 1 VO-109-70528;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:13 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	174621	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	263233	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	69099	10.00	ug/L	0.00

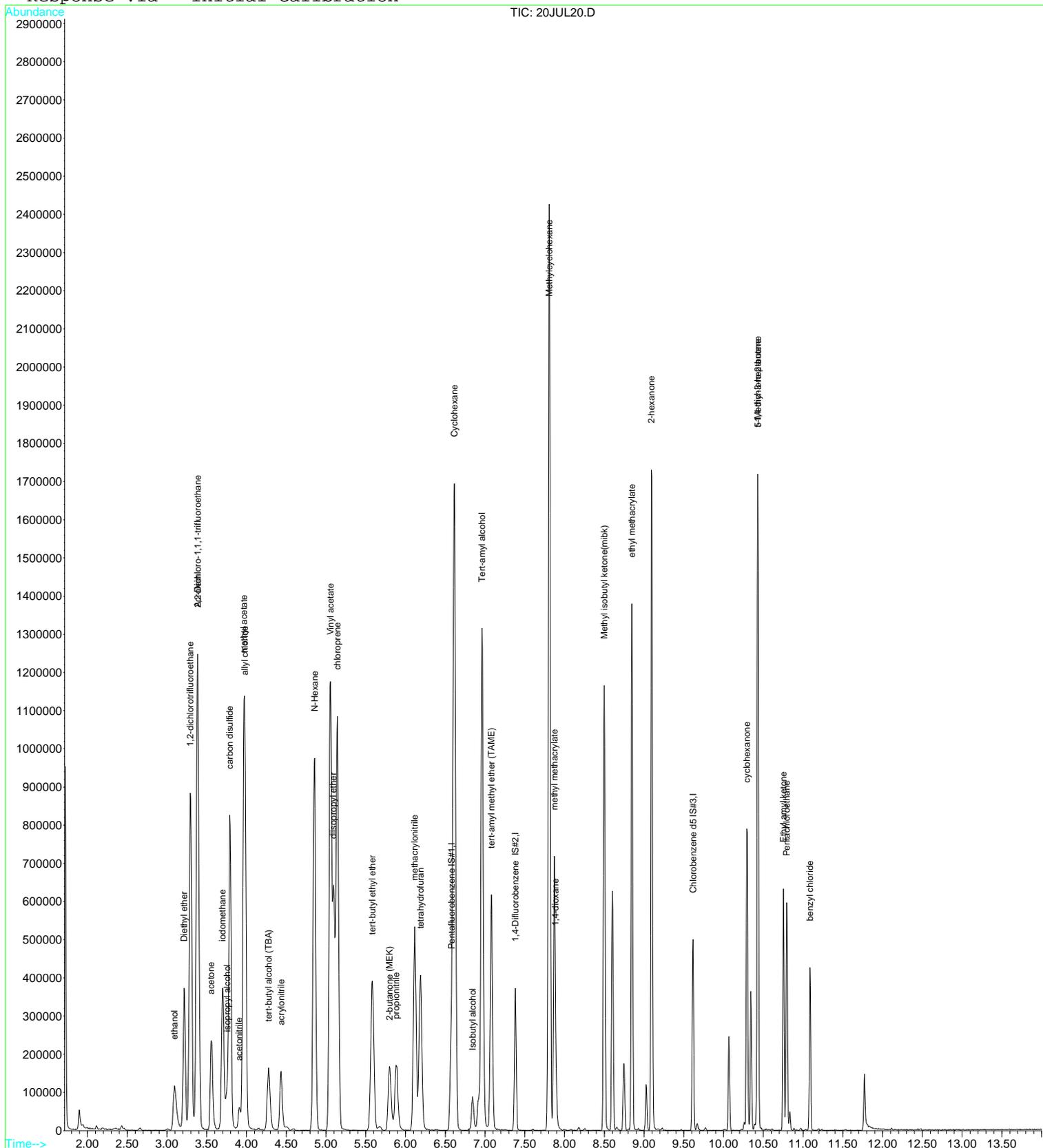
Target Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
2) ethanol	3.09	45	205730	7775.90	ug/L #		43
3) 2,2-Dichloro-1,1,1-trifluo	3.39	83	860452	51.70	ug/L #		76
4) 1,2-dichlorotrifluoroethan	3.29	67	590714	53.27	ug/L #		85
5) Diethyl ether	3.22	59	235219	51.00	ug/L		83
6) isopropyl alcohol	3.75	45	195278	1567.58	ug/L #		8
7) Acrolein	3.39	56	108941	245.71	ug/L #		69
8) acetone	3.55	43	344325	439.08	ug/L		95
9) tert-butyl alcohol (TBA)	4.28	59	252324	1550.67	ug/L		100
10) acetonitrile	3.91	41	83903	230.26	ug/L #		26
11) methyl acetate	3.96	43	1128055	525.19	ug/L		94
12) allyl chloride	3.98	41	862980	49.23	ug/L		96
13) iodomethane	3.70	142	539359	50.07	ug/L		98
14) acrylonitrile	4.44	53	154090	121.14	ug/L		95
15) carbon disulfide	3.79	76	1271472	47.91	ug/L		97
16) N-Hexane	4.86	57	623461	53.24	ug/L #		83
17) diisopropyl ether	5.10	87	157252	24.25	ug/L		89
18) Vinyl acetate	5.06	43	2385200	281.42	ug/L #		96
19) chloroprene	5.14	53	902085	47.31	ug/L		94
20) tert-butyl ethyl ether	5.58	59	505113	28.57	ug/L		95
21) 2-butanone (MEK)	5.80	43	302620	226.44	ug/L #		87
22) propionitrile	5.88	54	276513	606.77	ug/L #		89
23) Isobutyl alcohol	6.84	43	69599	909.31	ug/L #		76
24) methacrylonitrile	6.12	67	274890	234.12	ug/L		89
25) Tert-amyl alcohol	6.96	59	913464	5837.98	ug/L #		61
26) tetrahydrofuran	6.19	42	401837	448.07	ug/L		93
27) Cyclohexane	6.61	56	1165061	49.58	ug/L #		72
28) tert-amyl methyl ether (TA	7.08	73	285000	28.58	ug/L #		70
30) methyl methacrylate	7.87	69	241996	134.69	ug/L		95
31) Methylcyclohexane	7.81	55	877587	55.09	ug/L		93
32) 1,4-dioxane	7.89	88	73893	2856.51	ug/L		86
33) Methyl isobutyl ketone(mib	8.50	43	701682	234.30	ug/L		94
34) ethyl methacrylate	8.85	69	550973	141.22	ug/L		95
35) 2-hexanone	9.09	43	935679	466.85	ug/L		98
37) 5-Methyl-3-heptanone	10.43	43	334691	106.74	ug/L		94
38) cyclohexanone	10.29	55	313653	1873.15	ug/L		95
39) t-1,4-dichloro-2-butene	10.42	75	102481	180.83	ug/L #		20
40) Ethyl amyl ketone	10.75	57	152313	54.40	ug/L #		73
41) Pentachloroethane	10.79	167	70897	27.38	ug/L		91
42) benzyl chloride	11.09	91	232501	69.65	ug/L #		55

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL20.D
 Acq On : 20 Jul 2017 3:04 pm
 Sample : 1712752-CALB
 Misc : 1 VO-109-70528;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:13 2017

Vial: 20
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL21.D Vial: 21
 Acq On : 20 Jul 2017 3:27 pm Operator: MGC
 Sample : 1712752-CALC Inst : MS-V5
 Misc : 1 VO-109-70529;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:13 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	191859	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	287684	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	76272	10.00	ug/L	0.00

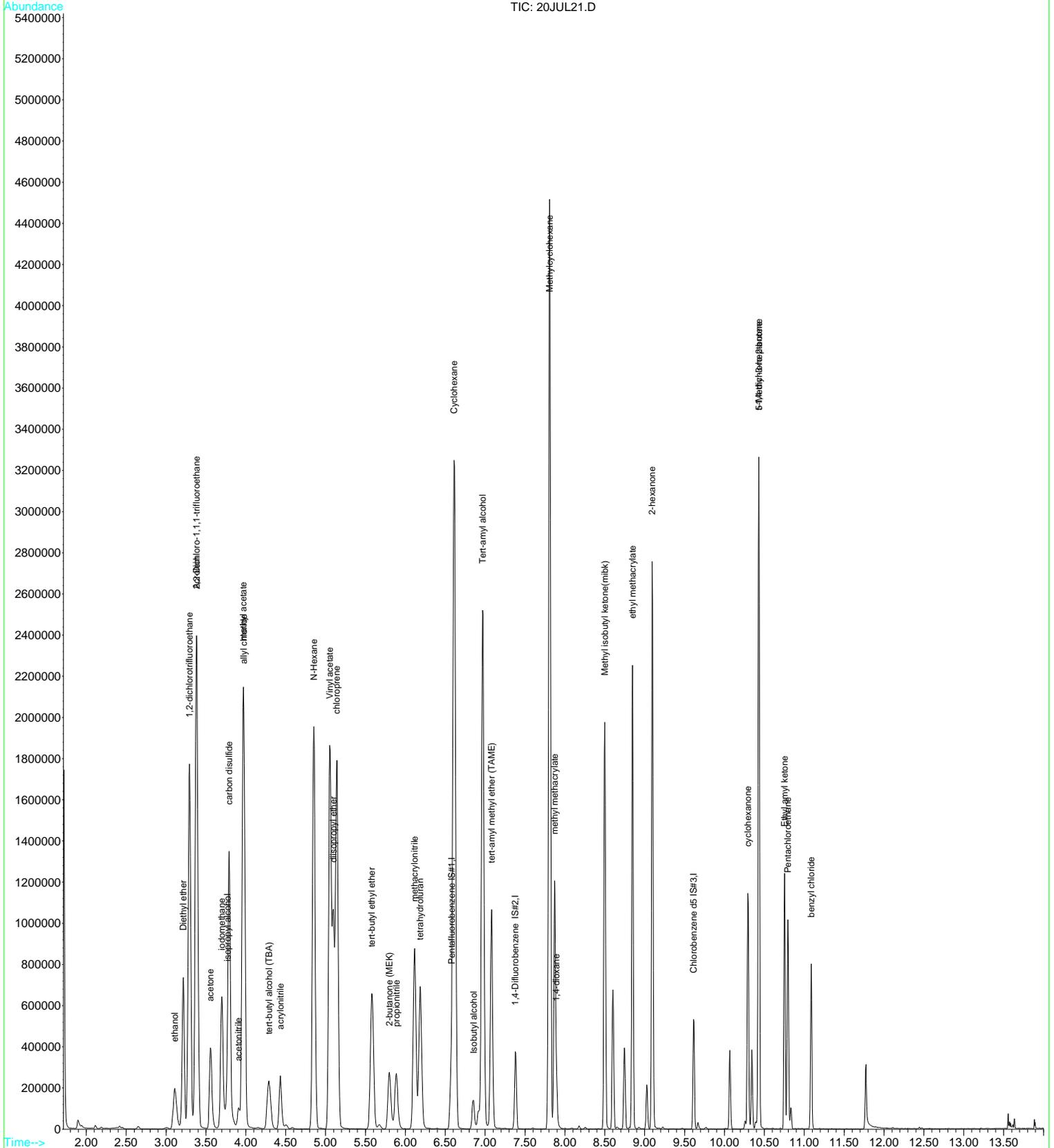
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.11	45	343157	11804.84	ug/L #	40
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	1694547	92.67	ug/L #	75
4) 1,2-dichlorotrifluoroethan	3.29	67	1178349	96.72	ug/L #	85
5) Diethyl ether	3.22	59	472236	93.20	ug/L	82
6) isopropyl alcohol	3.77	45	317937	2322.91	ug/L #	6
7) Acrolein	3.39	56	180190	369.90	ug/L #	72
8) acetone	3.56	43	577159	669.86	ug/L	96
9) tert-butyl alcohol (TBA)	4.29	59	450091	2517.53	ug/L	100
10) acetonitrile	3.91	41	136990	342.17	ug/L #	27
11) methyl acetate	3.97	43	2174902	921.60	ug/L	91
12) allyl chloride	3.98	41	1442058	74.88	ug/L	97
13) iodomethane	3.70	142	960471	81.15	ug/L	99
14) acrylonitrile	4.43	53	249855	178.78	ug/L	95
15) carbon disulfide	3.79	76	2158751	74.03	ug/L	97
16) N-Hexane	4.85	57	1257523	97.74	ug/L #	84
17) diisopropyl ether	5.10	87	262020	36.77	ug/L	91
18) Vinyl acetate	5.05	43	3834502	411.77	ug/L #	95
19) chloroprene	5.14	53	1510657	72.11	ug/L	96
20) tert-butyl ethyl ether	5.58	59	868719	44.72	ug/L	93
21) 2-butanone (MEK)	5.79	43	505064	343.97	ug/L #	87
22) propionitrile	5.89	54	430629	860.06	ug/L #	87
23) Isobutyl alcohol	6.85	43	115290	1351.66	ug/L #	76
24) methacrylonitrile	6.12	67	474660	367.94	ug/L	87
25) Tert-amyl alcohol	6.97	59	1893937	10754.08	ug/L #	59
26) tetrahydrofuran	6.18	42	681592	691.73	ug/L	94
27) Cyclohexane	6.61	56	2255697	87.37	ug/L #	73
28) tert-amyl methyl ether (TA	7.08	73	485199	44.28	ug/L #	70
30) methyl methacrylate	7.87	69	415597	211.66	ug/L	97
31) Methylcyclohexane	7.81	55	1673839	96.15	ug/L	94
32) 1,4-dioxane	7.90	88	128386	4541.24	ug/L	89
33) Methyl isobutyl ketone(mib	8.50	43	1152352	352.08	ug/L	93
34) ethyl methacrylate	8.85	69	909414	213.28	ug/L	96
35) 2-hexanone	9.09	43	1491577	680.96	ug/L	96
37) 5-Methyl-3-heptanone	10.43	43	646664	186.84	ug/L	93
38) cyclohexanone	10.29	55	449992	2434.64	ug/L	94
39) t-1,4-dichloro-2-butene	10.43	75	176499	244.62	ug/L #	20
40) Ethyl amyl ketone	10.75	57	306368	99.14	ug/L #	71
41) Pentachloroethane	10.79	167	132243	45.16	ug/L	91
42) benzyl chloride	11.09	91	435458	97.53	ug/L #	54

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL21.D
Acq On : 20 Jul 2017 3:27 pm
Sample : 1712752-CALC
Misc : 1 VO-109-70529;25ML
MS Integration Params: rteint.p
Quant Time: Jul 21 4:13 2017

Vial: 21
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Tue Jul 11 13:50:19 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL50.D
 Acq On : 18 Jul 2017 12:00 am
 Sample : 1712538-CALD
 Misc : 1 VO-109-70472;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:12 2017

Vial: 50
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

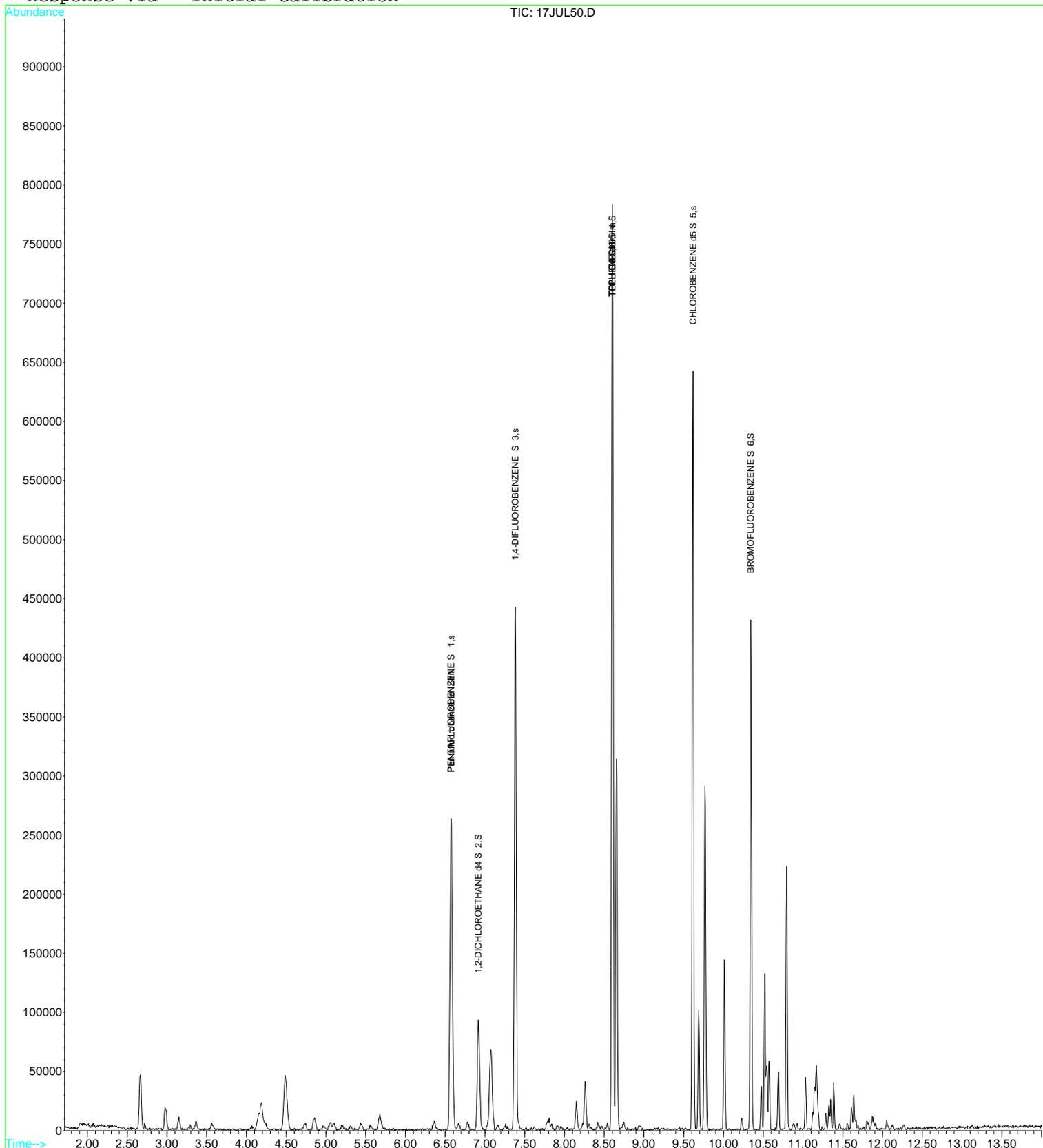
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	203330	10.00	ug/L	0.00
System Monitoring Compounds						
2) PENTAFLUOROBENZENE S 1	6.57	TIC	560010m	5.20	ug/L	0.00
3) 1,2-DICHLOROETHANE d4 S 2	6.92	TIC	196599m	3.33	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	759365m	6.84	ug/L	0.00
5) TOLUENE d8 S 4	8.60	TIC	1067752m	11.21	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.62	TIC	813344m	11.95	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	534468m	11.94	ug/L	0.00
Target Compounds						
8) TPPH-GAS	8.60	TIC	3323551m	57.88	ug/L	Qvalue
9) TPPH C6-C10	8.60	TIC	2289132m	59.15	ug/L	

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL50.D
Acq On : 18 Jul 2017 12:00 am
Sample : 1712538-CALD
Misc : 1 VO-109-70472;25ML
MS Integration Params: rteint.p
Quant Time: Jul 18 7:12 2017

Vial: 50
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Jul 06 06:15:28 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL51.D Vial: 51
 Acq On : 18 Jul 2017 12:23 am Operator: MGC
 Sample : 1712538-CALE Inst : MS-V5
 Misc : 1 VO-109-70473;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:13 2017 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

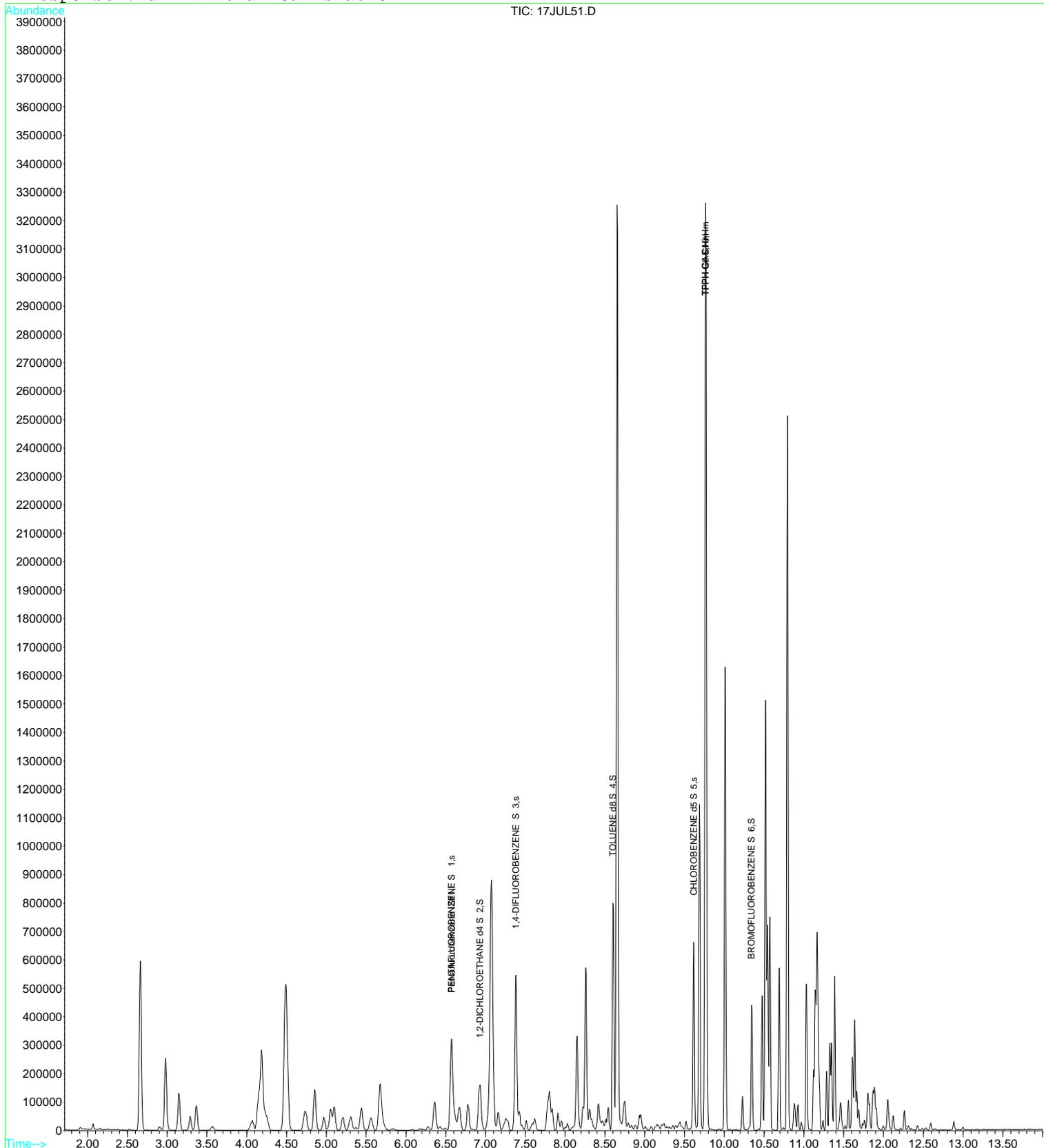
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	203353	10.00	ug/L	0.00
System Monitoring Compounds						
2) PENTAFLUOROBENZENE S 1	6.57	TIC	851300m	7.90	ug/L	0.00
3) 1,2-DICHLOROETHANE d4 S 2	6.93	TIC	412269m	6.97	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	997992m	8.99	ug/L	0.00
5) TOLUENE d8 S 4	8.60	TIC	1156175m	12.13	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.61	TIC	854311m	12.55	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	563664m	12.59	ug/L	0.00
Target Compounds						
8) TPPH-GAS	9.76	TIC	39200624m	682.56	ug/L	Qvalue
9) TPPH C6-C10	9.76	TIC	26681022m	689.37	ug/L	

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL51.D
Acq On : 18 Jul 2017 12:23 am
Sample : 1712538-CALE
Misc : 1 VO-109-70473;25ML
MS Integration Params: rteint.p
Quant Time: Jul 18 7:13 2017

Vial: 51
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Jul 06 06:15:28 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL52.D
 Acq On : 18 Jul 2017 12:46 am
 Sample : 1712538-CALF
 Misc : 1 VO-109-70474;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:16 2017

Vial: 52
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

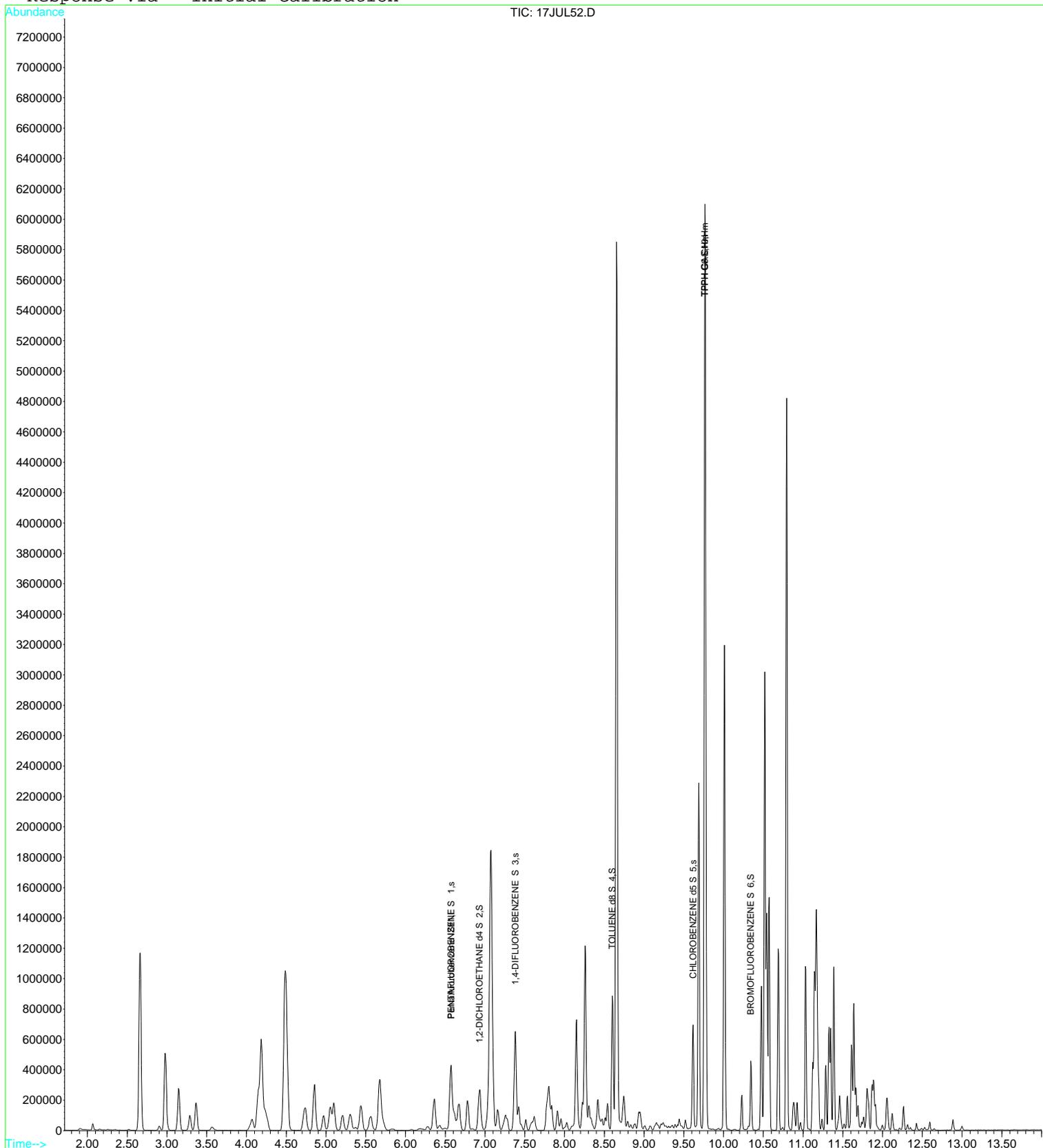
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	209806	10.00	ug/L	0.00
System Monitoring Compounds						
2) PENTAFLUOROBENZENE S 1	6.57	TIC	1172463m	10.55	ug/L	0.00
3) 1,2-DICHLOROETHANE d4 S 2	6.93	TIC	663952m	10.89	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	1294857m	11.31	ug/L	0.00
5) TOLUENE d8 S 4	8.60	TIC	1296741m	13.19	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.62	TIC	944425m	13.45	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	592237m	12.82	ug/L	0.00
Target Compounds						
8) TPPH-GAS	9.76	TIC	80422572m	1357.26	ug/L	Qvalue
9) TPPH C6-C10	9.76	TIC	54230618m	1358.10	ug/L	

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL52.D
Acq On : 18 Jul 2017 12:46 am
Sample : 1712538-CALF
Misc : 1 VO-109-70474;25ML
MS Integration Params: rteint.p
Quant Time: Jul 18 7:16 2017

Vial: 52
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Jul 06 06:15:28 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL53.D
 Acq On : 18 Jul 2017 1:09 am
 Sample : 1712538-CALG
 Misc : 1 VO-109-70475;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:18 2017

Vial: 53
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	214428	10.00	ug/L	0.00
System Monitoring Compounds						
2) PENTAFLUOROBENZENE S 1	6.57	TIC	1509629m	13.29	ug/L	0.00
3) 1,2-DICHLOROETHANE d4 S 2	6.93	TIC	903792m	14.50	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	1605859m	13.72	ug/L	-0.01
5) TOLUENE d8 S 4	8.60	TIC	1364310m	13.58	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.62	TIC	977979m	13.63	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	633462m	13.42	ug/L	0.00
Target Compounds						
8) TPPH-GAS	9.76	TIC	118942110m	1964.06	ug/L	Qvalue
9) TPPH C6-C10	9.76	TIC	79099535m	1938.19	ug/L	

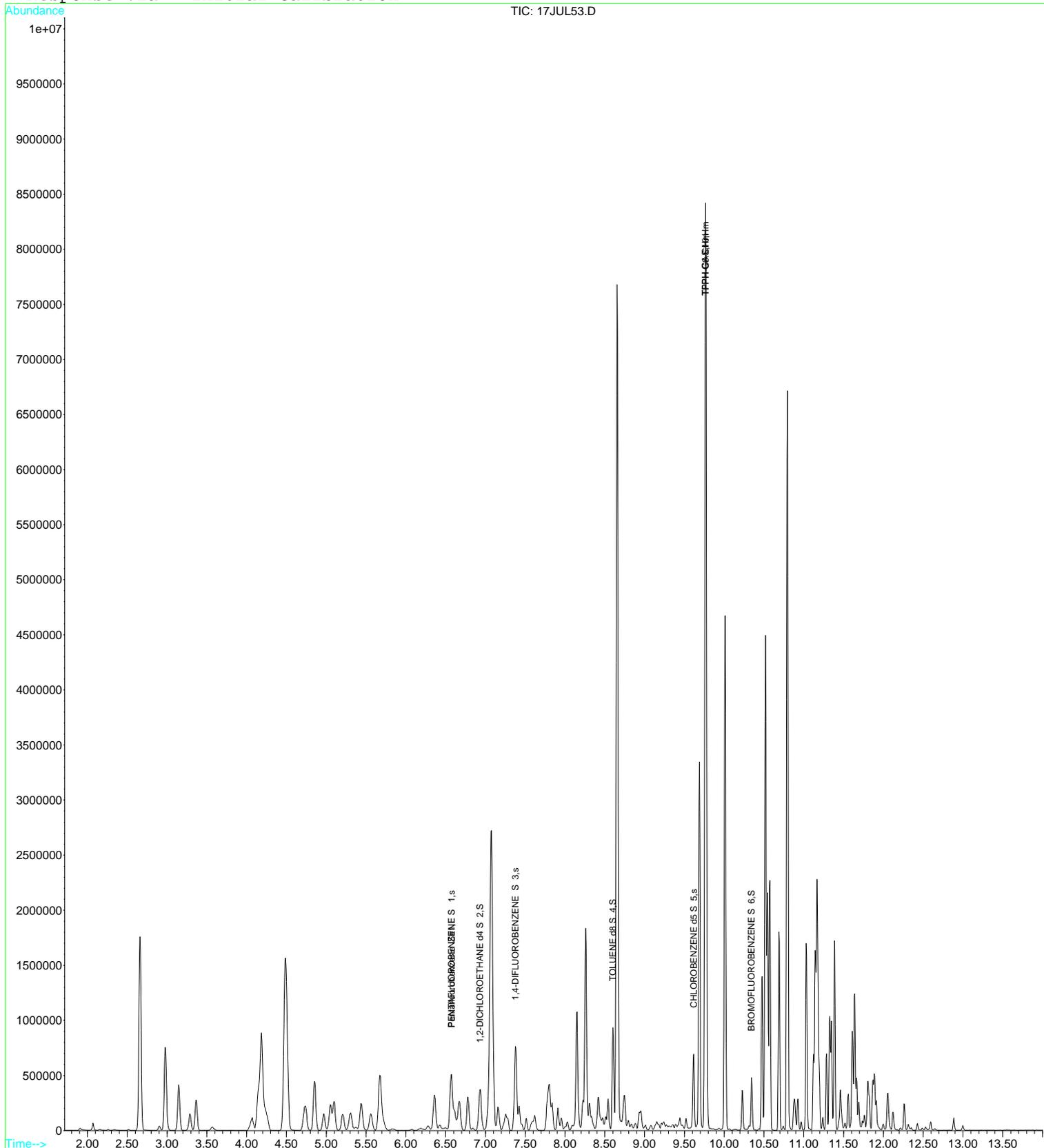
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL53.D
Acq On : 18 Jul 2017 1:09 am
Sample : 1712538-CALG
Misc : 1 VO-109-70475;25ML
MS Integration Params: rteint.p
Quant Time: Jul 18 7:18 2017

Vial: 53
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Jul 06 06:15:28 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL54.D Vial: 54
 Acq On : 18 Jul 2017 1:32 am Operator: MGC
 Sample : 1712538-CALH Inst : MS-V5
 Misc : 1 VO-109-70476;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:19 2017 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

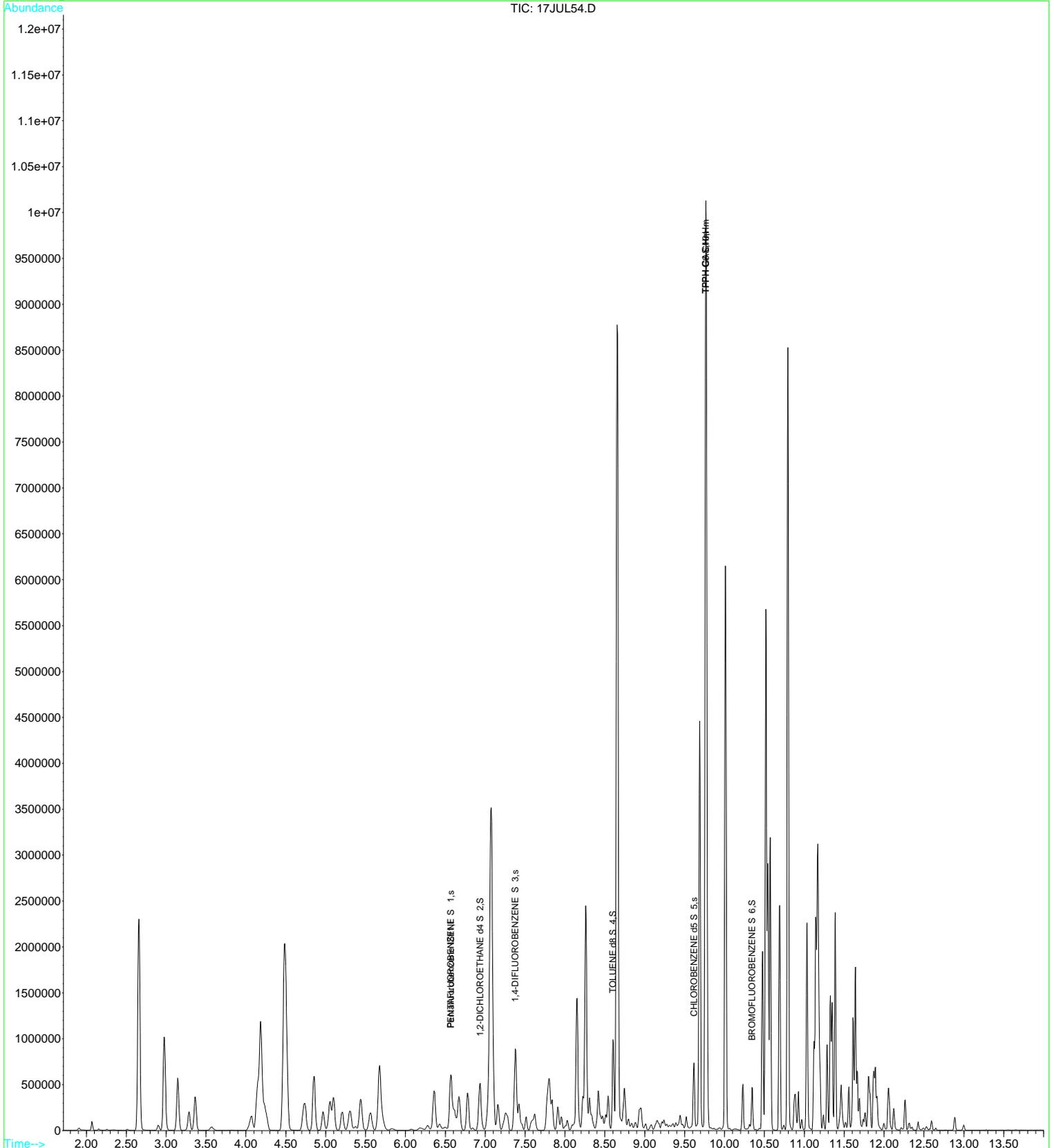
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	210761	10.00	ug/L	0.00
System Monitoring Compounds						
2) PENTAFLUOROBENZENE S 1	6.57	TIC	1839700m	16.47	ug/L	-0.01
3) 1,2-DICHLOROETHANE d4 S 2	6.94	TIC	1173334m	19.15	ug/L	0.01
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	1898061m	16.50	ug/L	-0.01
5) TOLUENE d8 S 4	8.60	TIC	1544544m	15.64	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.62	TIC	1056122m	14.97	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	631481m	13.61	ug/L	0.00
Target Compounds						
8) TPPH-GAS	9.76	TIC	158799376m	2667.84	ug/L	Qvalue
9) TPPH C6-C10	9.76	TIC	104534866m	2606.00	ug/L	

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL54.D
Acq On : 18 Jul 2017 1:32 am
Sample : 1712538-CALH
Misc : 1 VO-109-70476;25ML
MS Integration Params: rteint.p
Quant Time: Jul 18 7:19 2017

Vial: 54
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Jul 06 06:15:28 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL55.D
 Acq On : 18 Jul 2017 1:55 am
 Sample : 1712538-CALI
 Misc : 1 VO-109-70477;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:20 2017

Vial: 55
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	228564	10.00	ug/L	0.00
System Monitoring Compounds						
2) PENTAFLUOROBENZENE S 1	6.57	TIC	2313492m	19.10	ug/L	-0.01
3) 1,2-DICHLOROETHANE d4 S 2	6.93	TIC	1481531m	22.30	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	2246811m	18.01	ug/L	-0.01
5) TOLUENE d8 S 4	8.60	TIC	1660426m	15.50	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.61	TIC	1178573m	15.40	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.35	TIC	685683m	13.63	ug/L	0.00
Target Compounds						
8) TPPH-GAS	9.77	TIC	198270607m	3071.51	ug/L	Qvalue
9) TPPH C6-C10	9.77	TIC	129763331m	2982.96	ug/L	

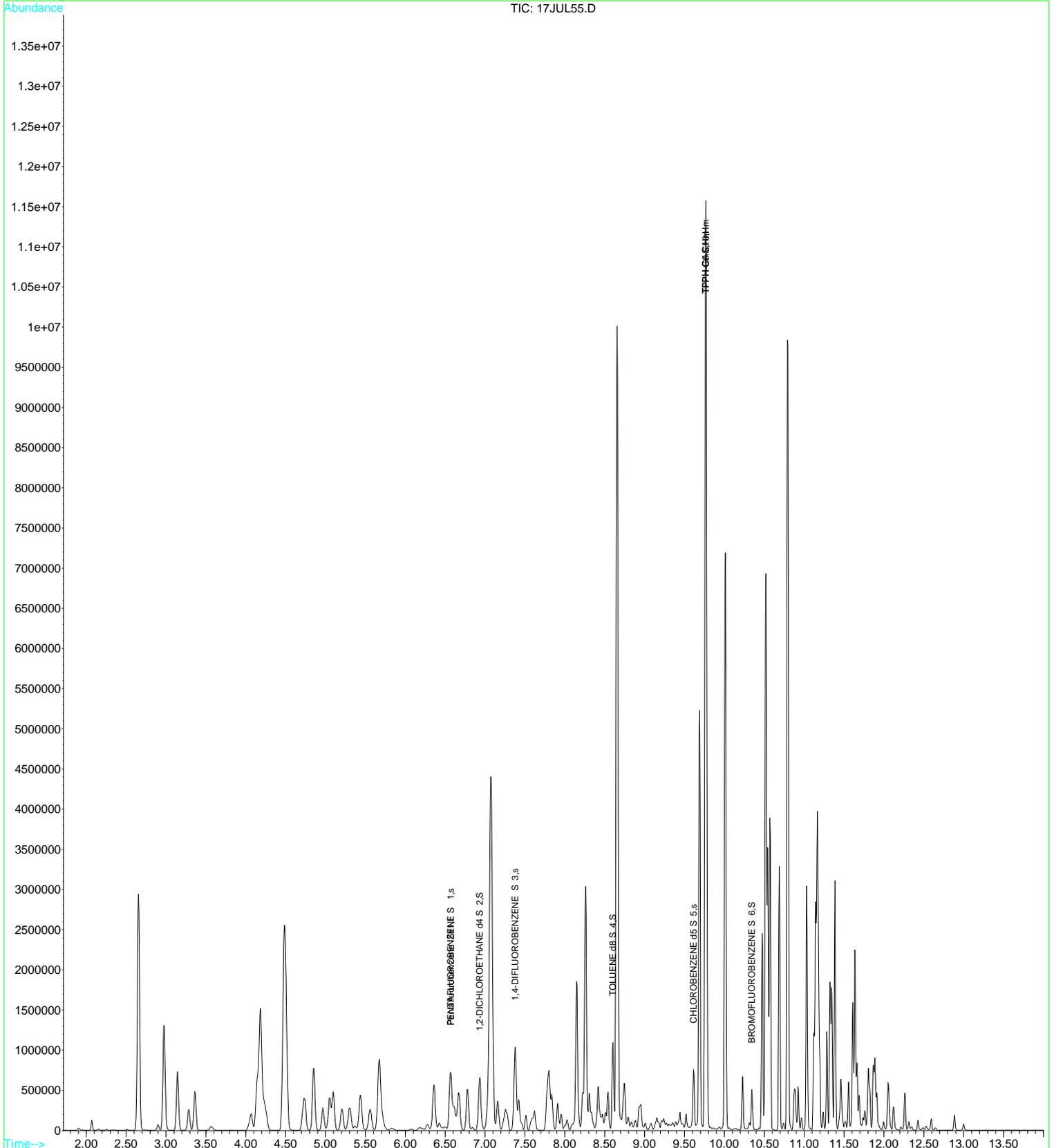
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL55.D
Acq On : 18 Jul 2017 1:55 am
Sample : 1712538-CALI
Misc : 1 VO-109-70477;25ML
MS Integration Params: rteint.p
Quant Time: Jul 18 7:20 2017

Vial: 55
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

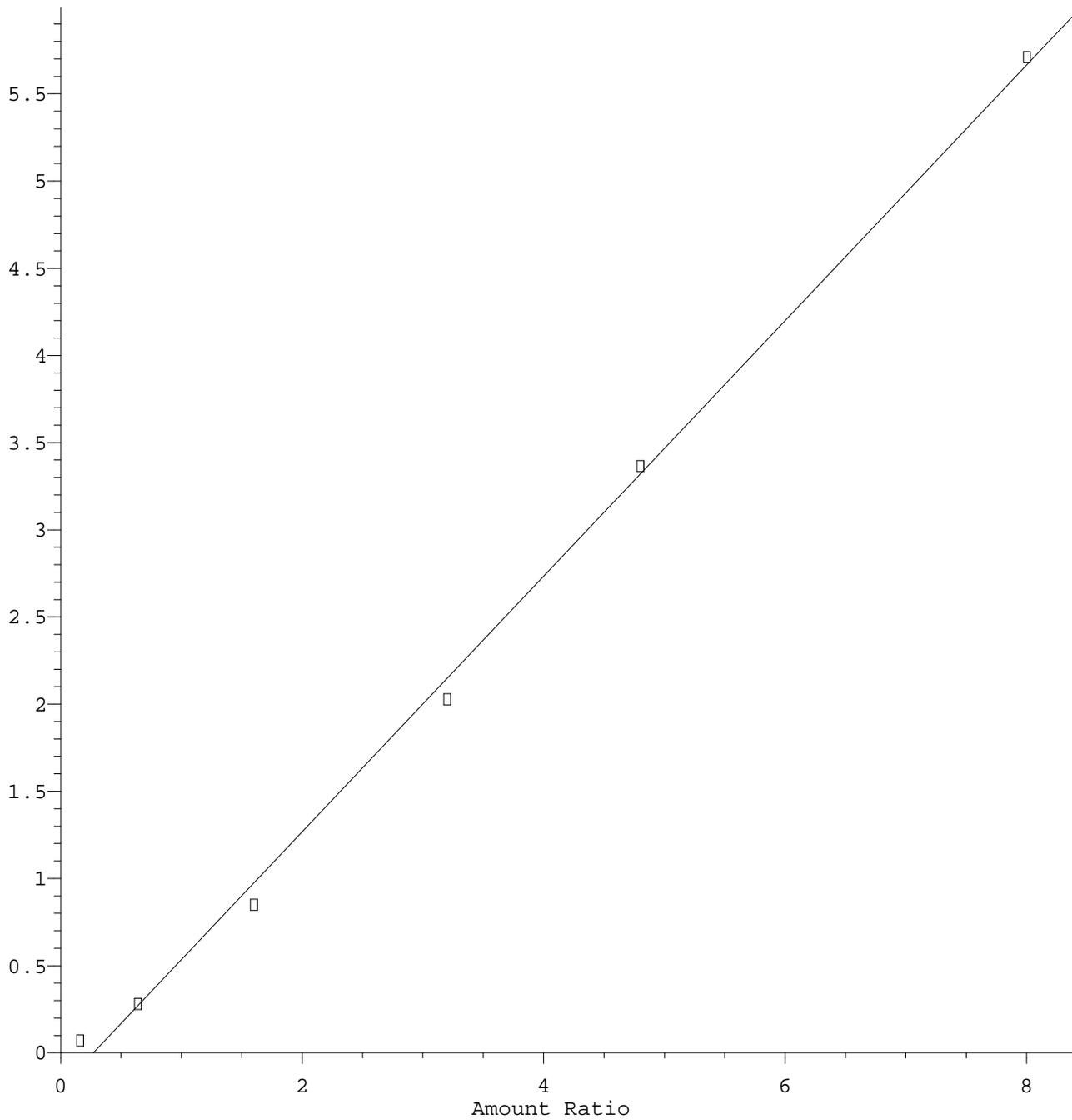
Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Jul 06 06:15:28 2017
Response via : Initial Calibration



benzyl chloride

Response Ratio

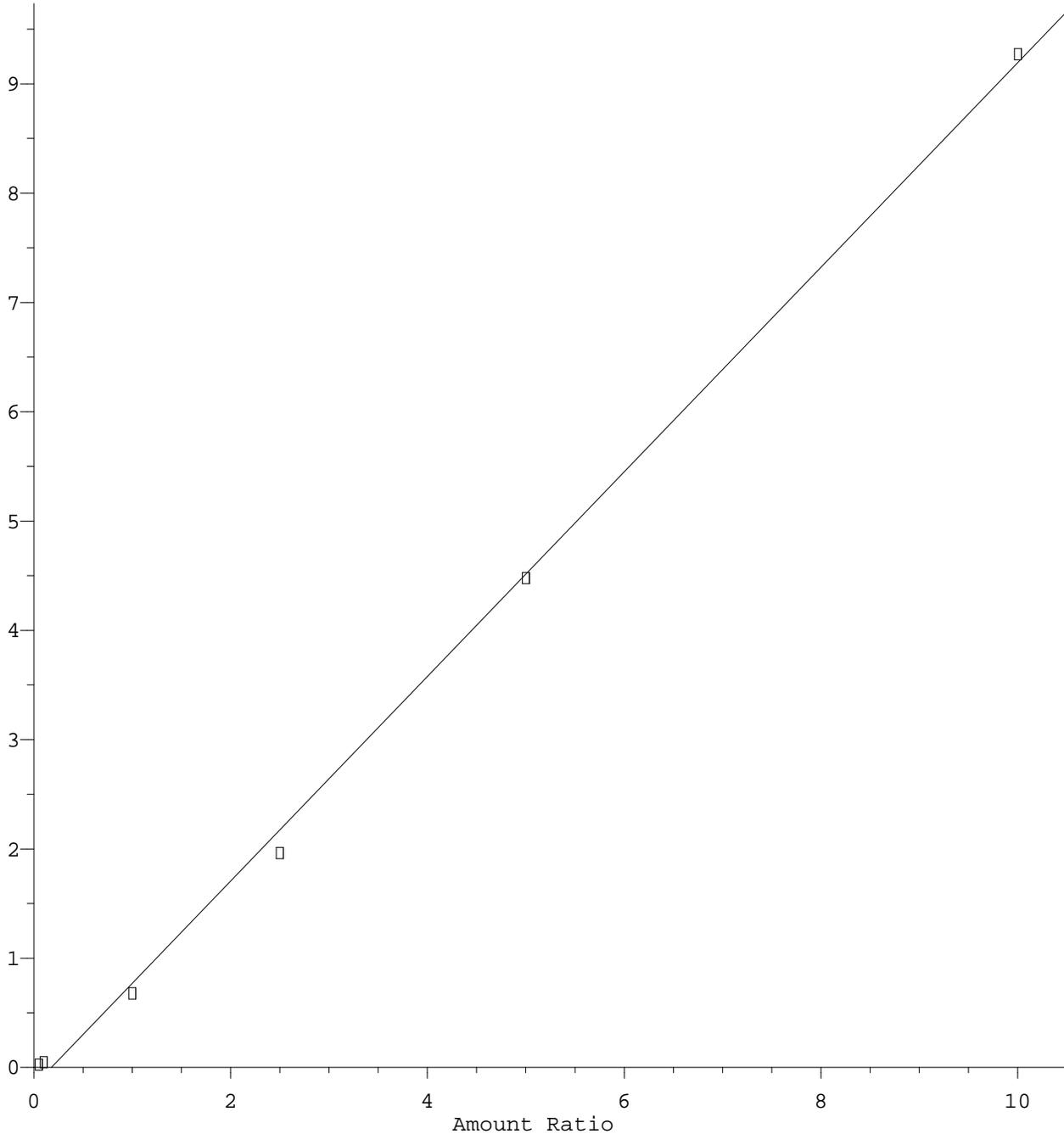


Resp Ratio = 7.33e-001 * Amt - 1.98e-001
Coef of Det (r^2) = 0.998 Curve Fit: Linear

Method Name: C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M
Calibration Table Last Updated: Fri Jul 21 04:19:15 2017

Hexachloroethane

Response Ratio



Resp Ratio = 9.36e-001 * Amt - 1.66e-001
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M
Calibration Table Last Updated: Thu Jul 20 11:28:22 2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - ICV

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL12.D
 Acq On : 20 Jul 2017 12:00 pm
 Sample : 1712752-ICV1
 Misc : 1 VO-109-70513;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 12:46 2017

Vial: 12
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	184644	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	285117	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	74559	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	53963	10.01	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	100.10%
31) Toluene d8 SMC#2	8.60	98	343093	9.74	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.40%
49) Bromofluorobenzene SMC#3	10.34	95	115722	10.39	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	103.90%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	241916	26.33	ug/L	95
3) Chloromethane	1.95	50	378706	21.80	ug/L	99
4) Vinyl chloride	2.07	62	338693	24.48	ug/L #	66
5) Bromomethane	2.44	94	188479	25.11	ug/L #	89
6) Chloroethane	2.57	64	229100	24.11	ug/L	98
7) Trichlorofluoromethane	2.87	101	290783	25.57	ug/L	97
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	206626	26.47	ug/L #	83
9) 1,1-Dichloroethene	3.51	61	386451	25.94	ug/L	96
10) Methylene chloride	4.15	84	198309	24.89	ug/L	98
11) MTBE	4.48	73	285059	25.57	ug/L #	77
12) T-1,2-dichloroethene	4.50	96	245512	26.54	ug/L	91
13) 1,1-Dichloroethane	5.05	63	503562	25.49	ug/L	100
14) 2,2-Dichloropropane	5.82	77	288286	25.93	ug/L	93
15) Cis-1,2-dichloroethene	5.82	96	244222	25.33	ug/L	95
16) Bromochloromethane	6.18	128	75372	24.53	ug/L #	86
17) Chloroform	6.32	83	348453	24.93	ug/L	94
18) 1,1,1-Trichloroethane	6.53	97	312087	25.79	ug/L #	71
19) 1,1-Dichloropropene	6.72	75	308677	24.42	ug/L	94
20) Carbon tetrachloride	6.71	119	211410	25.48	ug/L	91
22) 1,2-Dichloroethane	7.00	62	183710	24.46	ug/L #	85
23) Benzene	6.94	78	941279	24.89	ug/L #	7
25) Trichloroethene	7.60	130	248559	25.39	ug/L	90
26) 1,2-Dichloropropane	7.83	63	261996	24.22	ug/L	94
27) Dibromomethane	7.90	93	73001	26.74	ug/L	98
28) Bromodichloromethane	8.05	83	207514	25.28	ug/L	92
29) 2-ceve	8.27	63	285733	102.27	ug/L #	75
30) Cis-1,3-dichloropropene	8.40	75	267335	26.09	ug/L	98
32) Toluene	8.65	92	616474	24.96	ug/L	93
33) Trans-1,3-dichloropropene	8.82	75	174804	26.13	ug/L #	83
34) 1,1,2-Trichloroethane	8.97	97	111939	25.22	ug/L	85
35) Tetrachloroethene (PCE)	9.03	166	239008	25.47	ug/L	95
36) 1,3-Dichloropropane	9.08	76	170622	23.67	ug/L	97
37) Dibromochloromethane	9.23	129	113856	26.55	ug/L #	95
38) 1,2-Dibromoethane	9.32	107	96637	26.20	ug/L	97
40) Chlorobenzene	9.64	112	577549	23.36	ug/L	90
41) 1,1,1,2-Tetrachloroethane	9.69	131	163410	26.86	ug/L	98
42) Ethylbenzene	9.69	106	374920	25.81	ug/L	82
43) P+m-Xylene	9.77	106	908616	51.13	ug/L	98
44) O-Xylene	10.01	106	421259	25.65	ug/L	90
45) Styrene	10.02	104	662005	26.45	ug/L	92
46) Bromoform	10.15	173	48942	26.74	ug/L #	100
47) Isopropylbenzene	10.23	105	1115723	26.25	ug/L	98
48) 1,1,2,2-Tetrachloroethane	10.40	83	105100	25.92	ug/L	94
50) 1,2,3-Trichloropropene	10.45	110	22372	25.96	ug/L #	18
51) n-propylbenzene	10.48	91	1339682	24.27	ug/L	93

(#) = qualifier out of range (m) = manual integration
 20JUL12.D 82605.M Thu Jul 20 12:47:21 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL12.D Vial: 12
 Acq On : 20 Jul 2017 12:00 pm Operator: MGC
 Sample : 1712752-ICV1 Inst : MS-V5
 Misc : 1 VO-109-70513;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 12:46 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

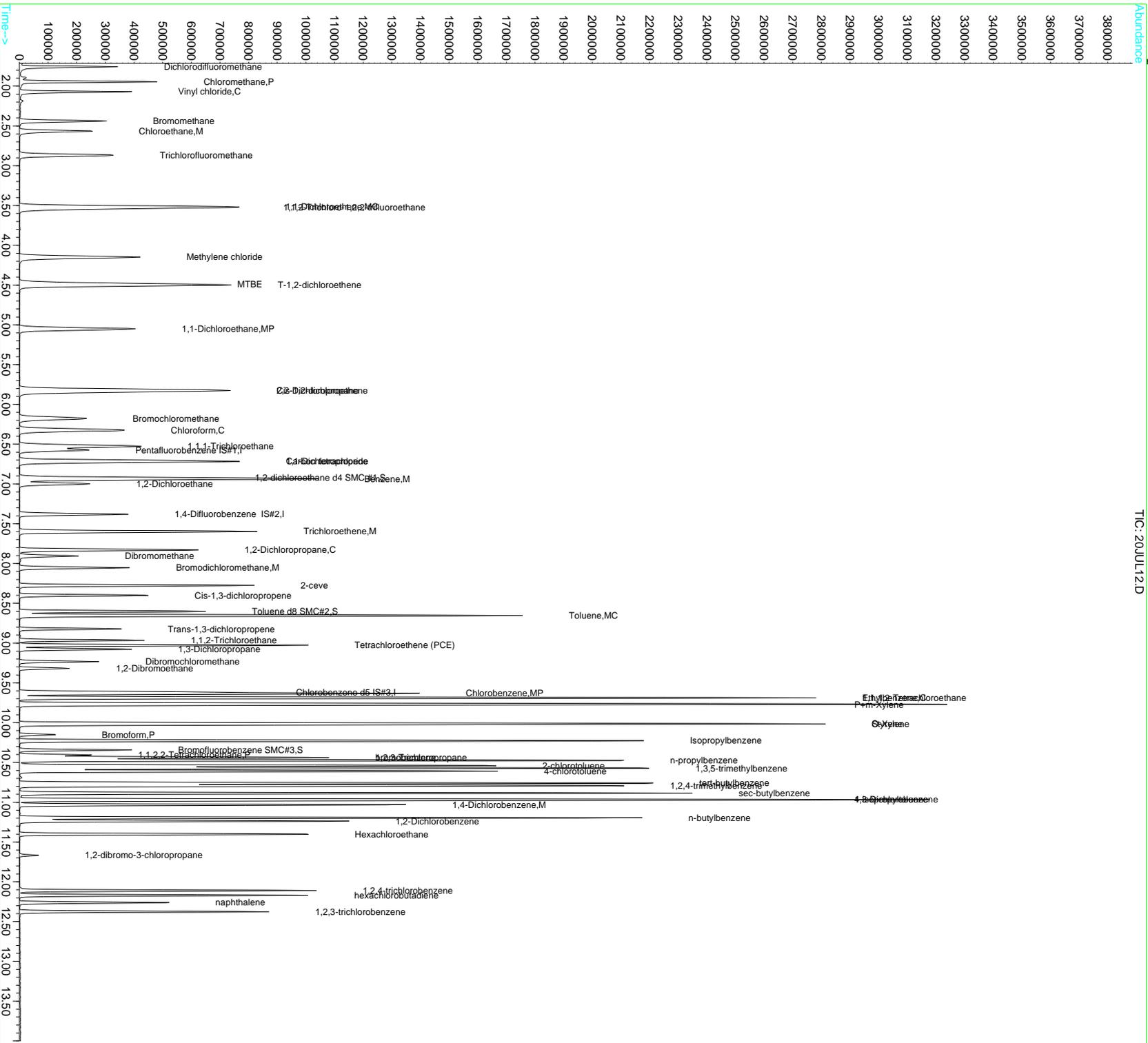
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	219690	25.23	ug/L	88
53) 1,3,5-trimethylbenzene	10.57	105	949684	27.00	ug/L	93
54) 2-chlorotoluene	10.54	91	842498	24.16	ug/L	98
55) 4-chlorotoluene	10.61	91	767453	24.37	ug/L	96
56) tert-butylbenzene	10.76	119	882705	25.40	ug/L	96
57) 1,2,4-trimethylbenzene	10.79	105	907566	26.05	ug/L	94
58) sec-butylbenzene	10.89	105	1254394	26.64	ug/L	100
59) 4-isopropyltoluene	10.97	119	1024754	26.69	ug/L	97
60) 1,3-Dichlorobenzene	10.97	146	453670	24.34	ug/L	95
61) 1,4-Dichlorobenzene	11.03	146	444088	24.38	ug/L	96
62) n-butylbenzene	11.19	91	933671	26.10	ug/L	99
63) 1,2-Dichlorobenzene	11.23	146	386179	24.02	ug/L	97
64) Hexachloroethane	11.40	117	135394	21.18	ug/L #	69
65) 1,2-dibromo-3-chloropropan	11.67	75	15398	28.17	ug/L	91
66) 1,2,4-trichlorobenzene	12.11	180	251966	27.06	ug/L	100
67) hexachlorobutadiene	12.17	225	162539	25.21	ug/L #	84
68) naphthalene	12.26	128	310035	26.50	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	208438	26.67	ug/L #	89

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL12.D
Acq On : 20 Jul 2017 12:00 pm
Sample : 1712752-ICV1
Misc : 1 VO-109-70513;25ML
MS Integration Params: rteint.p
Quant Time: Jul 20 12:46 2017

Vial: 12
Operator: MGC
Inst: MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL24.D Vial: 24
 Acq On : 20 Jul 2017 4:36 pm Operator: MGC
 Sample : 1712752-ICV2 Inst : MS-V5
 Misc : 1 VO-109-70530;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:21 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	179876	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	278423	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	74706	10.00	ug/L	0.00

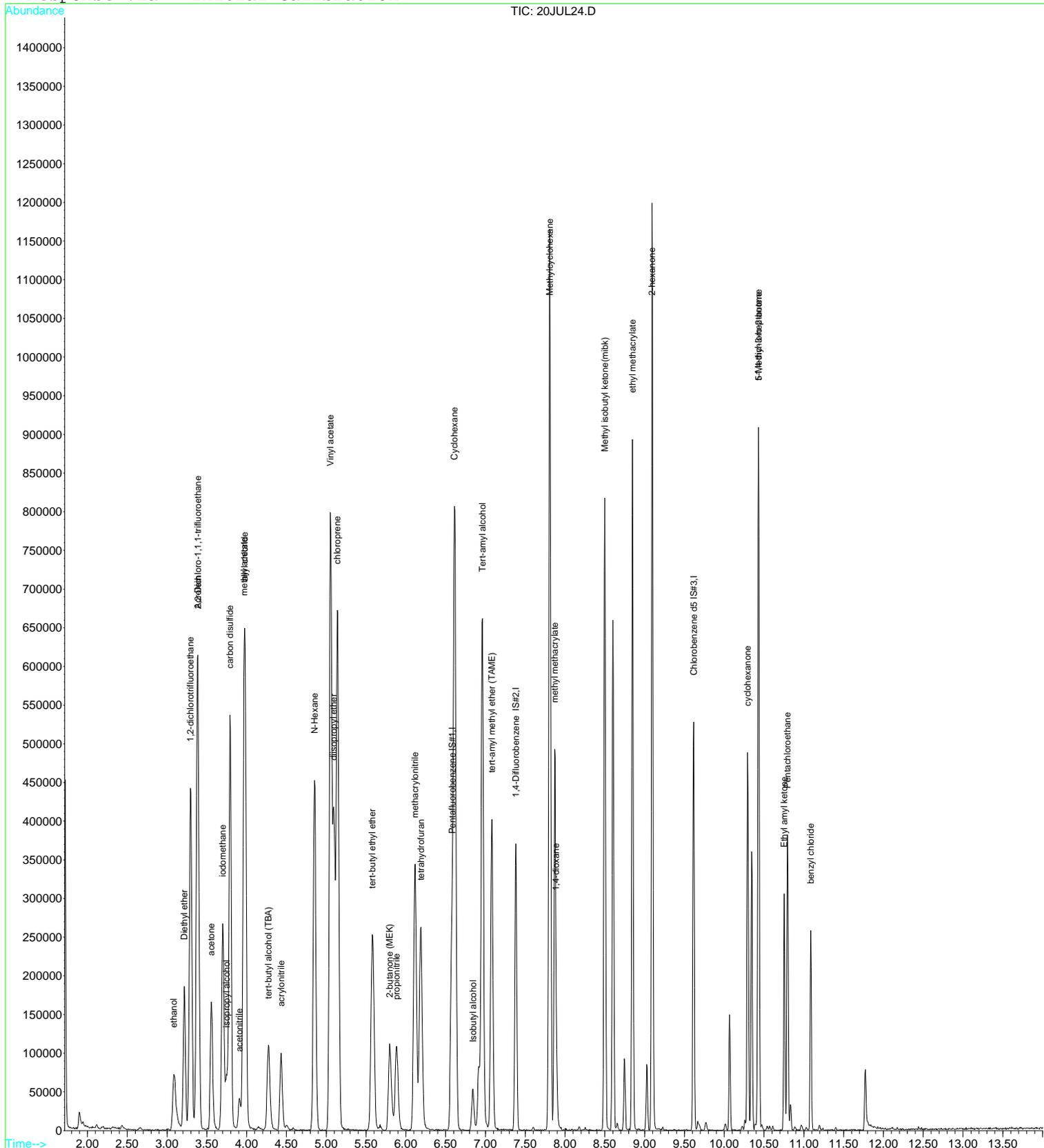
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.08	45	127453	3929.60	ug/L #	73
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	420319	24.64	ug/L #	87
4) 1,2-dichlorotrifluoroethan	3.29	67	292511	24.68	ug/L #	81
5) Diethyl ether	3.22	59	118802	26.41	ug/L	90
6) isopropyl alcohol	3.74	45	122507	819.41	ug/L #	1
7) Acrolein	3.39	56	63185	192.76	ug/L	81
8) acetone	3.56	43	230727	311.29	ug/L	100
9) tert-butyl alcohol (TBA)	4.27	59	165706	778.65	ug/L	100
10) acetonitrile	3.91	41	55234	156.48	ug/L	97
11) methyl acetate	3.97	43	568654	254.75	ug/L	91
12) allyl chloride	3.98	41	557738	30.91	ug/L	98
13) iodomethane	3.70	142	364725	34.40	ug/L	97
14) acrylonitrile	4.43	53	96813	79.22	ug/L	93
15) carbon disulfide	3.79	76	824259	30.22	ug/L	99
16) N-Hexane	4.85	57	287419	24.86	ug/L	87
17) diisopropyl ether	5.09	87	104607	15.56	ug/L	85
18) Vinyl acetate	5.05	43	1569127	149.46	ug/L	97
19) chloroprene	5.14	53	566479	29.87	ug/L	93
20) tert-butyl ethyl ether	5.58	59	328771	14.95	ug/L	98
21) 2-butanone (MEK)	5.79	43	197827	150.32	ug/L	91
22) propionitrile	5.88	54	172476	390.39	ug/L #	88
23) Isobutyl alcohol	6.84	43	44736	438.87	ug/L #	44
24) methacrylonitrile	6.12	67	184168	152.91	ug/L	99
25) Tert-amyl alcohol	6.96	59	447157	2592.35	ug/L	96
26) tetrahydrofuran	6.19	42	263903	298.79	ug/L	92
27) Cyclohexane	6.61	56	558244	23.71	ug/L #	75
28) tert-amyl methyl ether (TA	7.09	73	190513	15.74	ug/L	95
30) methyl methacrylate	7.87	69	159661	76.81	ug/L	92
31) Methylcyclohexane	7.81	55	427662	25.13	ug/L	94
32) 1,4-dioxane	7.89	88	49285	1946.96	ug/L	95
33) Methyl isobutyl ketone(mib	8.50	43	469794	150.81	ug/L	98
34) ethyl methacrylate	8.85	69	360408	75.79	ug/L	97
35) 2-hexanone	9.09	43	633115	300.02	ug/L	95
37) 5-Methyl-3-heptanone	10.43	43	169907	49.65	ug/L	88
38) cyclohexanone	10.29	55	183001	370.13	ug/L	100
39) t-1,4-dichloro-2-butene	10.43	75	62206	79.09	ug/L #	67
40) Ethyl amyl ketone	10.75	57	72626	24.56	ug/L #	79
41) Pentachloroethane	10.79	167	44898	15.02	ug/L	99
42) benzyl chloride	11.09	91	141546	28.55	ug/L	98

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL24.D
 Acq On : 20 Jul 2017 4:36 pm
 Sample : 1712752-ICV2
 Misc : 1 VO-109-70530;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:21 2017

Vial: 24
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration





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Raw Data - ICB

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL14.D
 Acq On : 20 Jul 2017 12:46 pm
 Sample : 1712752-ICB1
 Misc : 1 ICB1;25ML

Vial: 14
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 20 13:51 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	181261	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	281231	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	73863	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	55952	10.57	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	105.70%
31) Toluene d8 SMC#2	8.60	98	342270	9.86	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.60%
49) Bromofluorobenzene SMC#3	10.35	95	109375	9.92	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.20%

Target Compounds

Qvalue

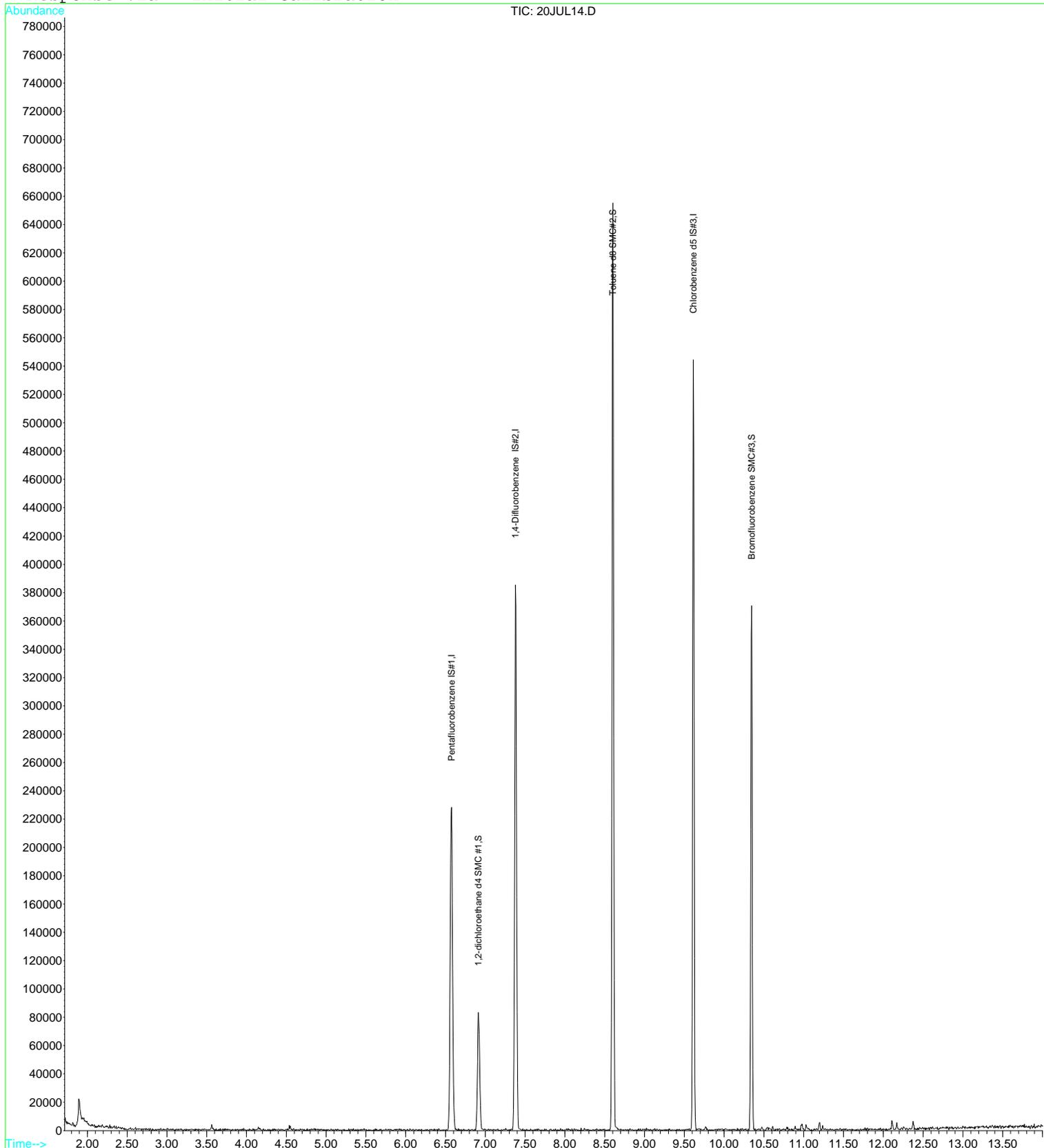
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL14.D
Acq On : 20 Jul 2017 12:46 pm
Sample : 1712752-ICB1
Misc : 1 ICB1;25ML
MS Integration Params: rteint.p
Quant Time: Jul 20 13:51 2017

Vial: 14
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL26.D Vial: 26
 Acq On : 20 Jul 2017 5:22 pm Operator: MGC
 Sample : 1712752-ICB2 Inst : MS-V5
 Misc : 1 ICB2;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:22 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	171673	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	268403	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	71809	10.00	ug/L	0.00

Target Compounds Qvalue

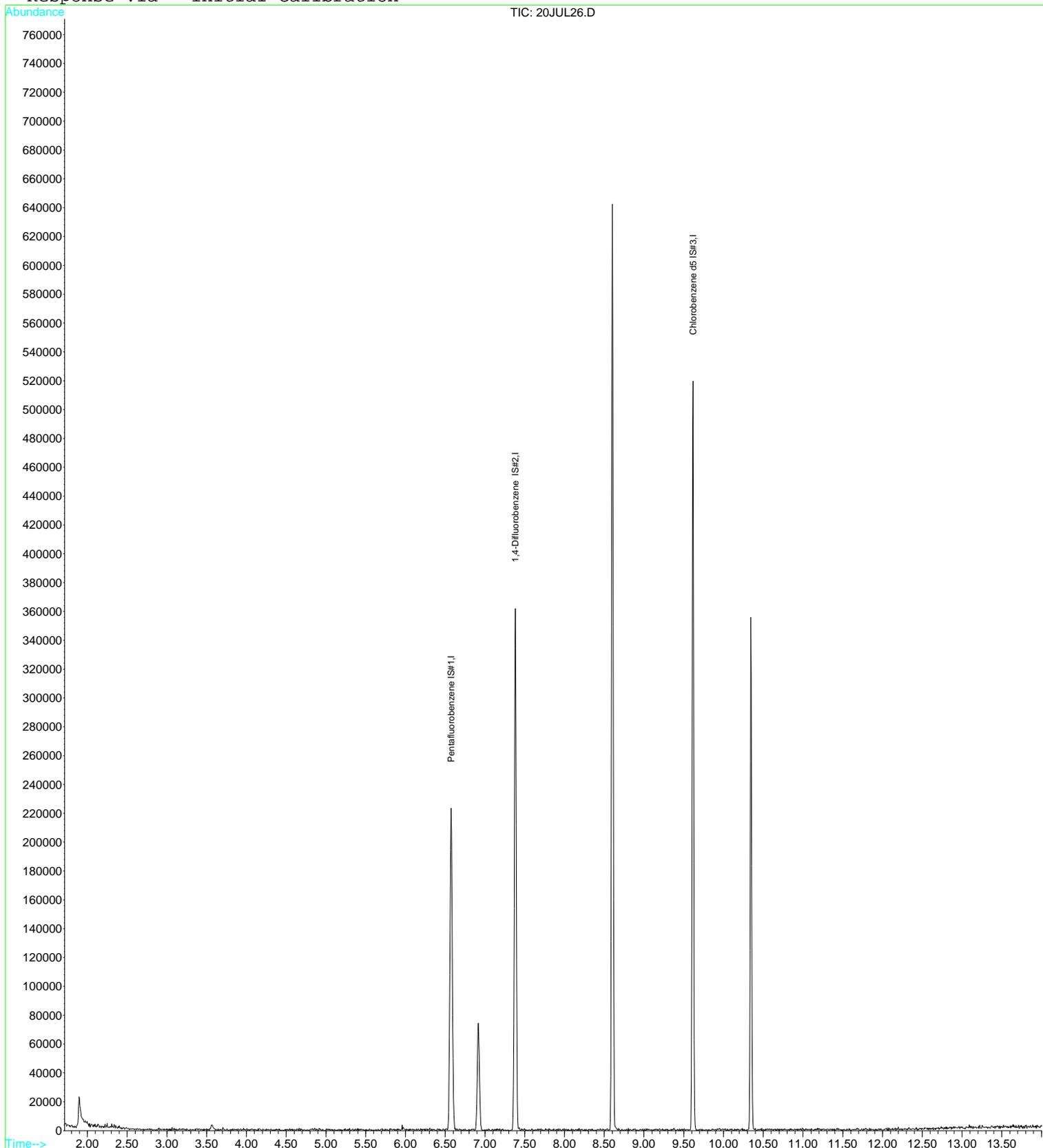
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL26.D
Acq On : 20 Jul 2017 5:22 pm
Sample : 1712752-ICB2
Misc : 1 ICB2;25ML
MS Integration Params: rteint.p
Quant Time: Jul 21 4:22 2017

Vial: 26
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





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Raw Data - CCV

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL63.D
 Acq On : 29 Jul 2017 7:16 am
 Sample : 1713324-CCV5
 Misc : 1 VO-109-70505;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 29 7:30 2017

Vial: 63
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	167483	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	235658	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	62331	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	45857	9.37	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	93.70%
31) Toluene d8 SMC#2	8.60	98	291434	10.01	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.10%
49) Bromofluorobenzene SMC#3	10.34	95	88252	9.48	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.80%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	179102	21.49	ug/L	97
3) Chloromethane	1.95	50	308934	19.61	ug/L	99
4) Vinyl chloride	2.07	62	279933	22.30	ug/L #	66
5) Bromomethane	2.44	94	99428	14.60	ug/L #	88
6) Chloroethane	2.57	64	179278	20.80	ug/L	97
7) Trichlorofluoromethane	2.87	101	250820	24.32	ug/L	98
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	159718	22.55	ug/L #	85
9) 1,1-Dichloroethene	3.51	61	308249	22.81	ug/L	95
10) Methylene chloride	4.15	84	162389	22.47	ug/L	98
11) MTBE	4.48	73	210135	20.78	ug/L #	76
12) T-1,2-dichloroethene	4.50	96	184028	21.93	ug/L	93
13) 1,1-Dichloroethane	5.05	63	393620	21.96	ug/L	99
14) 2,2-Dichloropropane	5.82	77	169488	16.80	ug/L	76
15) Cis-1,2-dichloroethene	5.82	96	189510	21.67	ug/L	93
16) Bromochloromethane	6.17	128	61113	21.92	ug/L #	88
17) Chloroform	6.32	83	282167	22.25	ug/L	95
18) 1,1,1-Trichloroethane	6.53	97	256685	23.38	ug/L #	68
19) 1,1-Dichloropropene	6.72	75	255642	22.30	ug/L	94
20) Carbon tetrachloride	6.71	119	181784	24.16	ug/L	92
22) 1,2-Dichloroethane	7.00	62	157260	23.08	ug/L #	89
23) Benzene	6.93	78	740160	21.58	ug/L #	8
25) Trichloroethene	7.60	130	221963	27.43	ug/L	89
26) 1,2-Dichloropropane	7.83	63	207928	23.26	ug/L	97
27) Dibromomethane	7.90	93	53810	23.84	ug/L	93
28) Bromodichloromethane	8.05	83	170694	25.16	ug/L	94
29) 2-ceve	8.27	63	201762	87.37	ug/L #	76
30) Cis-1,3-dichloropropene	8.40	75	195661	23.10	ug/L	96
32) Toluene	8.65	92	501187	24.55	ug/L	91
33) Trans-1,3-dichloropropene	8.82	75	133630	24.17	ug/L #	84
34) 1,1,2-Trichloroethane	8.97	97	85873	23.41	ug/L	83
35) Tetrachloroethene (PCE)	9.03	166	201561	25.99	ug/L	93
36) 1,3-Dichloropropane	9.08	76	135437	22.73	ug/L	94
37) Dibromochloromethane	9.23	129	91864	25.91	ug/L #	96
38) 1,2-Dibromoethane	9.32	107	70649	23.17	ug/L	94
40) Chlorobenzene	9.63	112	493482	23.87	ug/L	90
41) 1,1,1,2-Tetrachloroethane	9.69	131	138663	27.26	ug/L	95
42) Ethylbenzene	9.69	106	301280	24.81	ug/L	82
43) P+m-Xylene	9.77	106	735065	49.48	ug/L	99
44) O-Xylene	10.01	106	339145	24.71	ug/L	91
45) Styrene	10.02	104	524152	25.05	ug/L	94
46) Bromoform	10.15	173	39457	25.79	ug/L #	100
47) Isopropylbenzene	10.23	105	901426	25.37	ug/L	98
48) 1,1,2,2-Tetrachloroethane	10.41	83	72197	21.30	ug/L	96
50) 1,2,3-Trichloropropene	10.45	110	18129	25.16	ug/L #	18
51) n-propylbenzene	10.47	91	1106507	23.98	ug/L	93

(#) = qualifier out of range (m) = manual integration
 28JUL63.D 82605.M Sat Jul 29 09:32:23 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL63.D Vial: 63
 Acq On : 29 Jul 2017 7:16 am Operator: MGC
 Sample : 1713324-CCV5 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 7:30 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

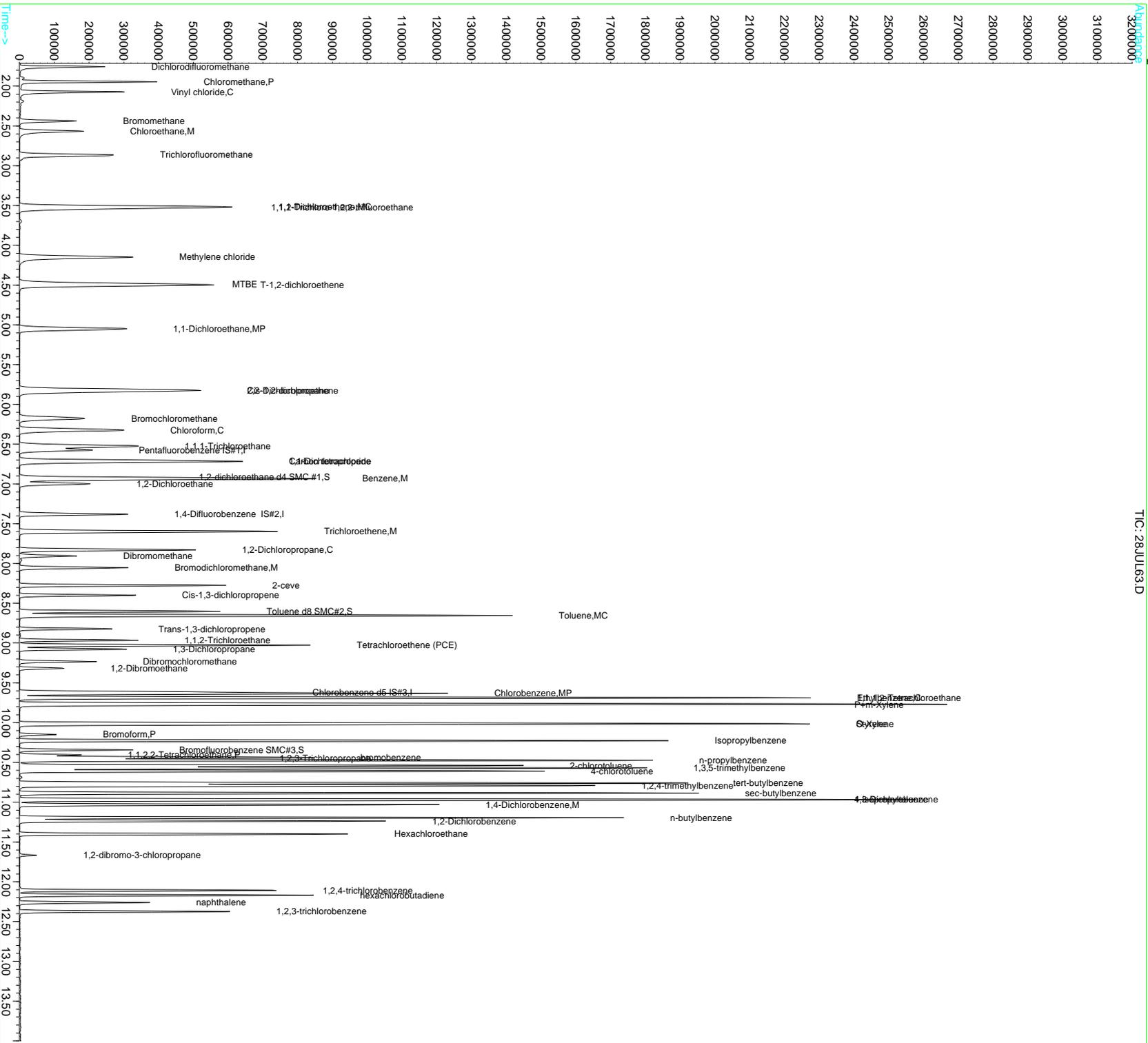
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	180481	24.79	ug/L	95
53) 1,3,5-trimethylbenzene	10.57	105	755606	25.70	ug/L	92
54) 2-chlorotoluene	10.54	91	726917	24.93	ug/L	100
55) 4-chlorotoluene	10.61	91	658127	25.00	ug/L	98
56) tert-butylbenzene	10.76	119	729783	25.12	ug/L	99
57) 1,2,4-trimethylbenzene	10.79	105	719374	24.70	ug/L	95
58) sec-butylbenzene	10.89	105	1028245	26.13	ug/L	98
59) 4-isopropyltoluene	10.96	119	819675	25.54	ug/L	97
60) 1,3-Dichlorobenzene	10.97	146	406910	26.11	ug/L	92
61) 1,4-Dichlorobenzene	11.03	146	391643	25.72	ug/L	94
62) n-butylbenzene	11.19	91	711417	23.79	ug/L	98
63) 1,2-Dichlorobenzene	11.24	146	342619	25.49	ug/L	96
64) Hexachloroethane	11.40	117	120649	22.46	ug/L #	72
65) 1,2-dibromo-3-chloropropan	11.67	75	10738	23.50	ug/L	95
66) 1,2,4-trichlorobenzene	12.11	180	187917	24.14	ug/L	99
67) hexachlorobutadiene	12.17	225	148321	27.52	ug/L #	89
68) naphthalene	12.26	128	221910	22.69	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	157678	24.13	ug/L #	90

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL63.D
Acq On : 29 Jul 2017 7:16 am
Sample : 1713324-CCV5
Misc : 1 VO-109-70505;25ML
MS Integration Params: rteint.p
Quant Time: Jul 29 7:30 2017

Vial: 63
Operator: MGC
Inst: MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL64.D Vial: 64
 Acq On : 29 Jul 2017 7:39 am Operator: MGC
 Sample : 1713324-CCV6 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:32 2017 Quant Results File: 82605X.RES

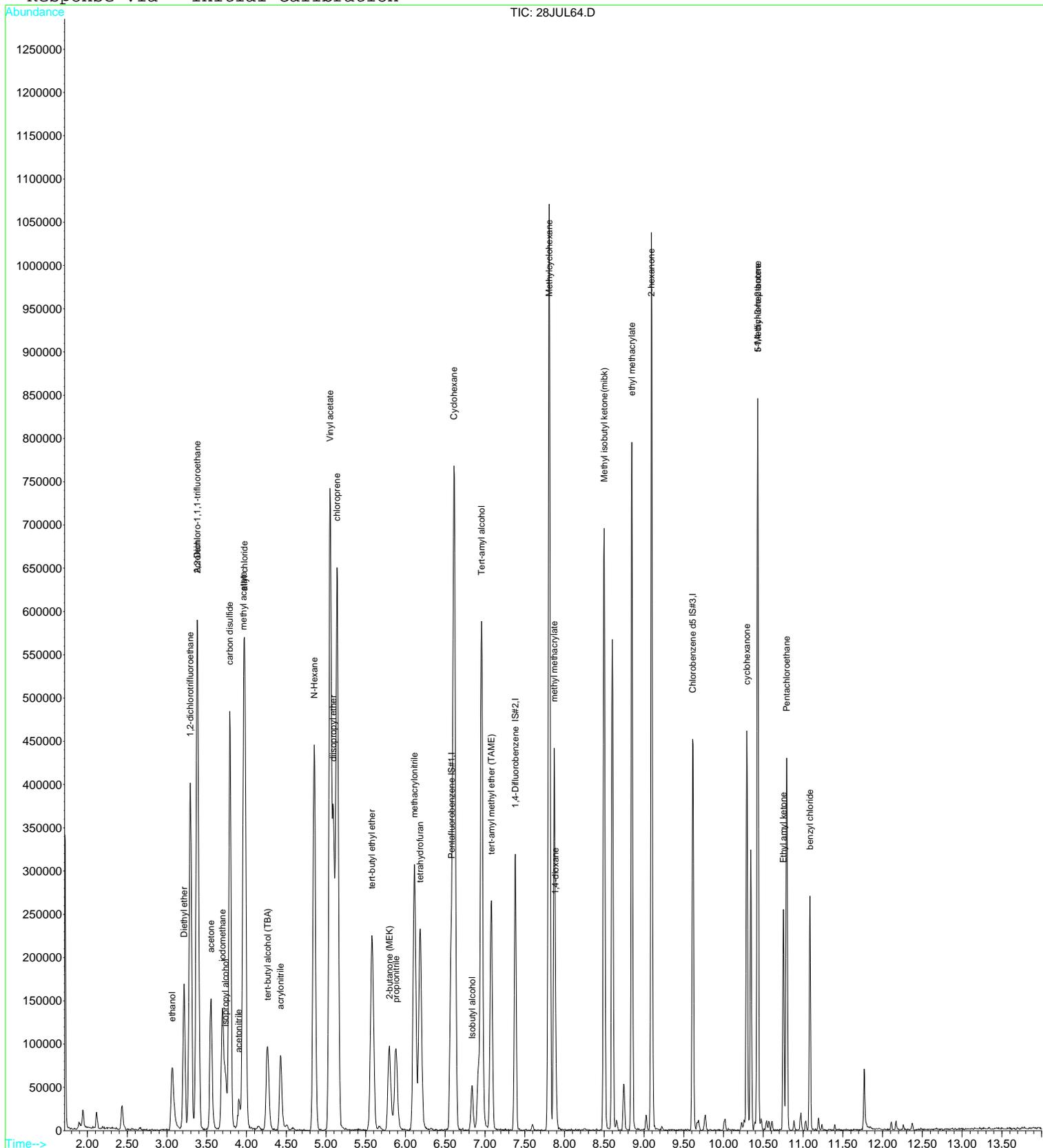
Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	162953	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	237313	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	64183	10.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.07	45	114072	3882.29	ug/L #	73
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	387756	25.09	ug/L #	89
4) 1,2-dichlorotrifluoroethan	3.29	67	264000	24.59	ug/L #	77
5) Diethyl ether	3.22	59	105316	25.85	ug/L	89
6) isopropyl alcohol	3.74	45	104319	770.22	ug/L #	73
7) Acrolein	3.39	56	61270	206.33	ug/L	84
8) acetone	3.55	43	210772	313.90	ug/L	97
9) tert-butyl alcohol (TBA)	4.27	59	144993	752.07	ug/L	100
10) acetonitrile	3.90	41	47743	149.30	ug/L	94
11) methyl acetate	3.96	43	507958	251.19	ug/L	92
12) allyl chloride	3.98	41	514975	31.50	ug/L	100
13) iodomethane	3.70	142	193319	20.12	ug/L	99
14) acrylonitrile	4.43	53	83714	75.62	ug/L	92
15) carbon disulfide	3.79	76	740235	29.96	ug/L	100
16) N-Hexane	4.85	57	273147	26.08	ug/L	89
17) diisopropyl ether	5.10	87	88557	14.54	ug/L	94
18) Vinyl acetate	5.05	43	1453306	152.81	ug/L	97
19) chloroprene	5.14	53	549390	31.98	ug/L	96
20) tert-butyl ethyl ether	5.58	59	288861	14.50	ug/L	97
21) 2-butanone (MEK)	5.79	43	174013	145.96	ug/L	86
22) propionitrile	5.88	54	150732	376.60	ug/L #	88
23) Isobutyl alcohol	6.83	43	40210	435.44	ug/L #	44
24) methacrylonitrile	6.11	67	157699	144.53	ug/L	96
25) Tert-amyl alcohol	6.96	59	385686	2468.19	ug/L	98
26) tetrahydrofuran	6.18	42	235811	294.71	ug/L	95
27) Cyclohexane	6.61	56	520383	24.40	ug/L #	75
28) tert-amyl methyl ether (TA	7.08	73	163487	14.91	ug/L	90
30) methyl methacrylate	7.87	69	134022	75.64	ug/L	83
31) Methylcyclohexane	7.81	55	393922	27.16	ug/L	95
32) 1,4-dioxane	7.89	88	39034	1809.12	ug/L	99
33) Methyl isobutyl ketone(mib	8.50	43	415583	156.52	ug/L	99
34) ethyl methacrylate	8.85	69	315229	77.77	ug/L	95
35) 2-hexanone	9.09	43	559741	311.20	ug/L	98
37) 5-Methyl-3-heptanone	10.43	43	162960	55.43	ug/L	84
38) cyclohexanone	10.29	55	173605	408.69	ug/L	97
39) t-1,4-dichloro-2-butene	10.43	75	52758	78.07	ug/L	69
40) Ethyl amyl ketone	10.75	57	63198	24.88	ug/L #	77
41) Pentachloroethane	10.79	167	54965	21.41	ug/L	99
42) benzyl chloride	11.09	91	141551	32.79	ug/L	98

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL64.D Vial: 64
 Acq On : 29 Jul 2017 7:39 am Operator: MGC
 Sample : 1713324-CCV6 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:32 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL13.D
 Acq On : 29 Jul 2017 7:08 pm
 Sample : 1713390-CCV3
 Misc : 1 VO-109-70505;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 29 19:22 2017

Vial: 13
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	180626	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	263149	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	72971	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	50775	9.62	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	96.20%
31) Toluene d8 SMC#2	8.60	98	326158	10.04	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.40%
49) Bromofluorobenzene SMC#3	10.34	95	106754	9.80	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.00%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	205174	22.83	ug/L	96
3) Chloromethane	1.95	50	362450	21.33	ug/L	98
4) Vinyl chloride	2.07	62	325076	24.02	ug/L #	66
5) Bromomethane	2.44	94	149499	20.36	ug/L #	89
6) Chloroethane	2.57	64	215171	23.15	ug/L	97
7) Trichlorofluoromethane	2.87	101	291894	26.24	ug/L	100
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	190877	24.99	ug/L #	85
9) 1,1-Dichloroethene	3.51	61	358017	24.56	ug/L	96
10) Methylene chloride	4.15	84	181190	23.25	ug/L	95
11) MTBE	4.48	73	254699	23.35	ug/L #	76
12) T-1,2-dichloroethene	4.50	96	216800	23.96	ug/L	93
13) 1,1-Dichloroethane	5.05	63	471608	24.40	ug/L	99
14) 2,2-Dichloropropane	5.83	77	269254	24.75	ug/L	92
15) Cis-1,2-dichloroethene	5.82	96	222183	23.56	ug/L	96
16) Bromochloromethane	6.17	128	73200	24.35	ug/L #	87
17) Chloroform	6.32	83	329219	24.07	ug/L	93
18) 1,1,1-Trichloroethane	6.53	97	308368	26.05	ug/L #	73
19) 1,1-Dichloropropene	6.72	75	300779	24.32	ug/L	94
20) Carbon tetrachloride	6.71	119	215165	26.51	ug/L	92
22) 1,2-Dichloroethane	7.00	62	188520	25.66	ug/L #	89
23) Benzene	6.93	78	869474	23.51	ug/L #	8
25) Trichloroethene	7.60	130	245179	27.13	ug/L	87
26) 1,2-Dichloropropane	7.83	63	244486	24.49	ug/L	96
27) Dibromomethane	7.90	93	67148	26.65	ug/L	97
28) Bromodichloromethane	8.05	83	199862	26.38	ug/L	88
29) 2-ceve	8.27	63	248327	96.31	ug/L #	78
30) Cis-1,3-dichloropropene	8.40	75	250672	26.50	ug/L	96
32) Toluene	8.65	92	586878	25.74	ug/L	93
33) Trans-1,3-dichloropropene	8.82	75	170109	27.55	ug/L #	83
34) 1,1,2-Trichloroethane	8.97	97	103929	25.37	ug/L	85
35) Tetrachloroethene (PCE)	9.03	166	232084	26.80	ug/L	93
36) 1,3-Dichloropropane	9.08	76	162627	24.44	ug/L	93
37) Dibromochloromethane	9.23	129	110093	27.81	ug/L #	90
38) 1,2-Dibromoethane	9.32	107	87836	25.80	ug/L	98
40) Chlorobenzene	9.63	112	595428	24.61	ug/L	89
41) 1,1,1,2-Tetrachloroethane	9.69	131	162946	27.36	ug/L	99
42) Ethylbenzene	9.69	106	355252	24.99	ug/L	82
43) P+m-Xylene	9.77	106	865020	49.74	ug/L	99
44) O-Xylene	10.01	106	403063	25.08	ug/L	90
45) Styrene	10.02	104	627272	25.61	ug/L	92
46) Bromoform	10.15	173	49622	27.70	ug/L #	100
47) Isopropylbenzene	10.23	105	1071253	25.75	ug/L	97
48) 1,1,2,2-Tetrachloroethane	10.40	83	98152	24.74	ug/L	94
50) 1,2,3-Trichloropropene	10.45	110	23142	27.43	ug/L #	19
51) n-propylbenzene	10.48	91	1303192	24.12	ug/L	93

(#) = qualifier out of range (m) = manual integration
 29JUL13.D 82605.M Sun Jul 30 05:27:08 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL13.D Vial: 13
 Acq On : 29 Jul 2017 7:08 pm Operator: MGC
 Sample : 1713390-CCV3 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 19:22 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

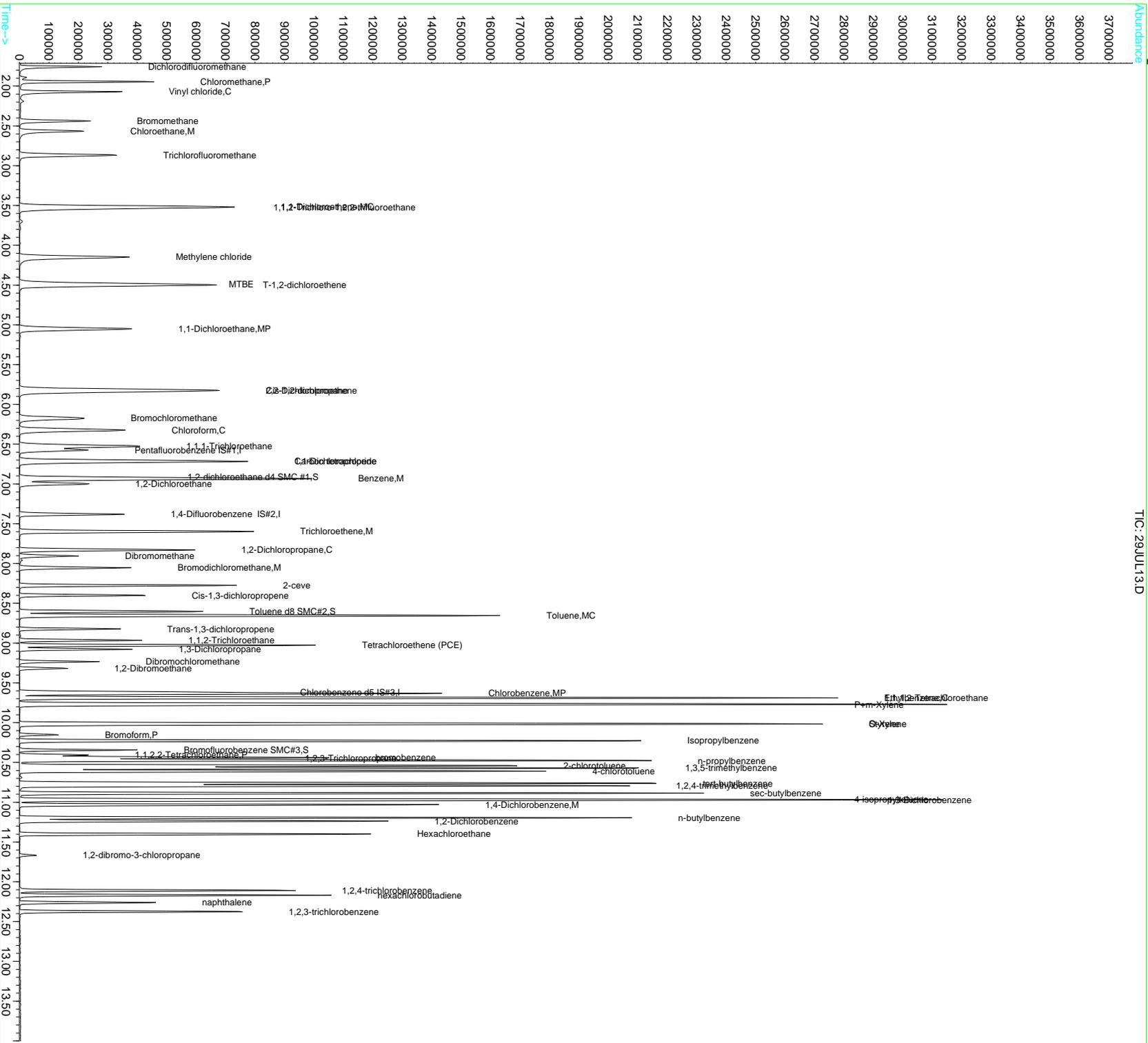
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	218267	25.61	ug/L	95
53) 1,3,5-trimethylbenzene	10.57	105	907253	26.35	ug/L	93
54) 2-chlorotoluene	10.54	91	867524	25.42	ug/L	99
55) 4-chlorotoluene	10.61	91	790953	25.66	ug/L	98
56) tert-butylbenzene	10.76	119	861165	25.32	ug/L	97
57) 1,2,4-trimethylbenzene	10.79	105	861936	25.28	ug/L	93
58) sec-butylbenzene	10.89	105	1218311	26.44	ug/L	98
59) 4-isopropyltoluene	10.96	119	981815	26.13	ug/L	96
60) 1,3-Dichlorobenzene	10.98	146	489592	26.84	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	477259	26.77	ug/L	94
62) n-butylbenzene	11.19	91	876318	25.03	ug/L	98
63) 1,2-Dichlorobenzene	11.23	146	418288	26.58	ug/L	95
64) Hexachloroethane	11.40	117	154295	24.37	ug/L #	70
65) 1,2-dibromo-3-chloropropan	11.67	75	13611	25.45	ug/L	95
66) 1,2,4-trichlorobenzene	12.11	180	237551	26.06	ug/L	98
67) hexachlorobutadiene	12.17	225	176486	27.97	ug/L #	86
68) naphthalene	12.26	128	282340	24.66	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	201798	26.38	ug/L #	93

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL13.D
Acq On : 29 Jul 2017 7:08 pm
Sample : 1713390-CCV3
Misc : 1 VO-109-70505;25ML
MS Integration Params: rteint.p
Quant Time: Jul 29 19:22 2017

Vial: 13
Operator: MGC
Inst: MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL14.D Vial: 14
 Acq On : 29 Jul 2017 7:31 pm Operator: MGC
 Sample : 1713390-CCV4 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 30 5:27 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

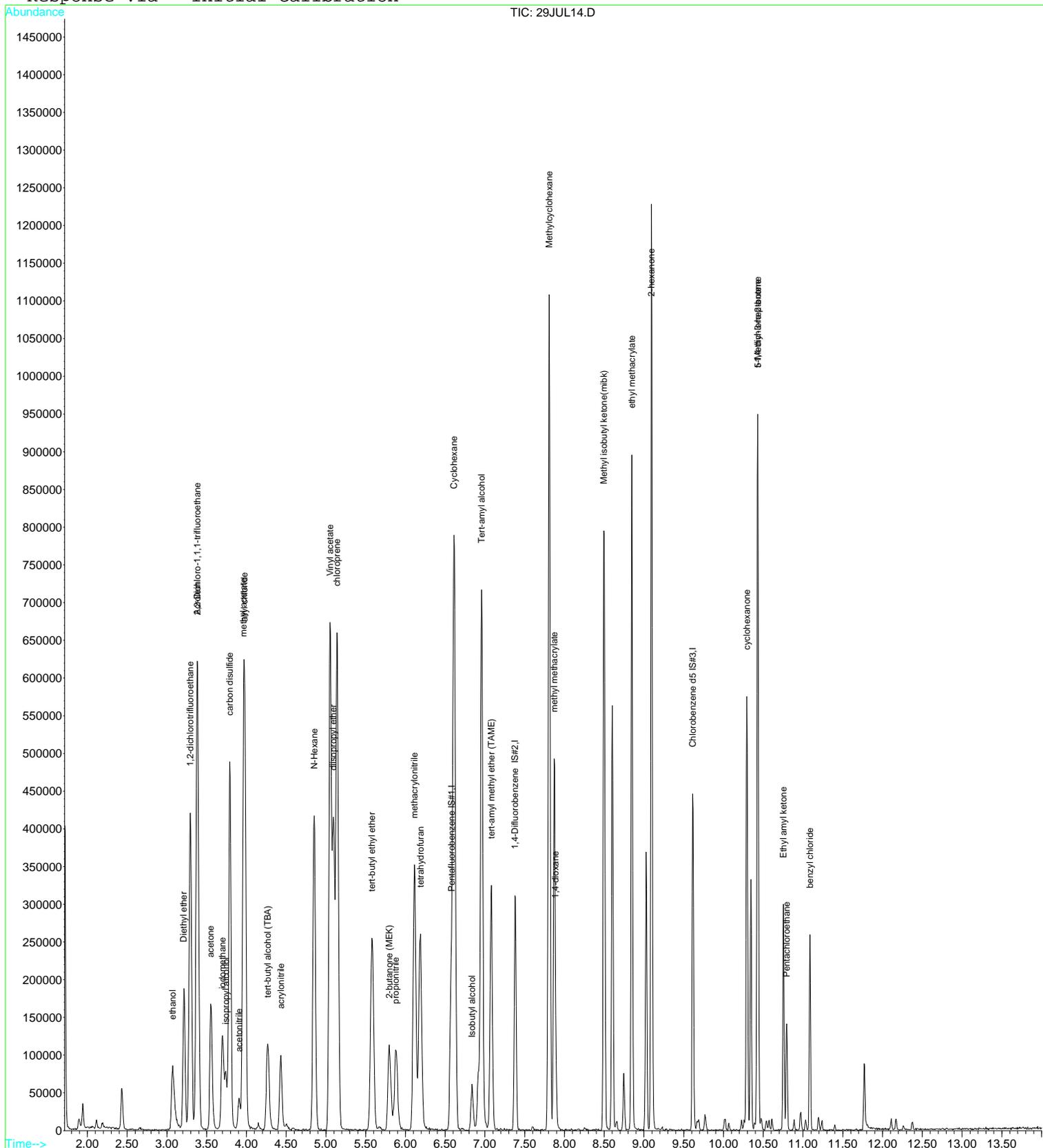
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	158448	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	236027	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	62675	10.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.07	45	139518	4883.32	ug/L #	76
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	406178	27.03	ug/L #	88
4) 1,2-dichlorotrifluoroethan	3.29	67	272862	26.14	ug/L #	75
5) Diethyl ether	3.22	59	119782	30.23	ug/L	90
6) isopropyl alcohol	3.74	45	129770	985.38	ug/L #	1
7) Acrolein	3.39	56	88434	306.27	ug/L	89
8) acetone	3.55	43	242532	371.47	ug/L	97
9) tert-butyl alcohol (TBA)	4.27	59	173930	927.82	ug/L	100
10) acetonitrile	3.90	41	56184	180.69	ug/L	97
11) methyl acetate	3.96	43	585203	297.62	ug/L	93
12) allyl chloride	3.98	41	524705	33.01	ug/L	99
13) iodomethane	3.70	142	176349	18.88	ug/L	97
14) acrylonitrile	4.43	53	94269	87.57	ug/L	91
15) carbon disulfide	3.79	76	750849	31.26	ug/L	100
16) N-Hexane	4.85	57	265351	26.05	ug/L	87
17) diisopropyl ether	5.09	87	93107	15.72	ug/L	96
18) Vinyl acetate	5.05	43	1348184	145.78	ug/L	99
19) chloroprene	5.14	53	559515	33.49	ug/L	96
20) tert-butyl ethyl ether	5.58	59	328806	16.97	ug/L	100
21) 2-butanone (MEK)	5.79	43	205300	177.10	ug/L	88
22) propionitrile	5.88	54	173579	446.01	ug/L #	89
23) Isobutyl alcohol	6.83	43	48419	539.24	ug/L #	43
24) methacrylonitrile	6.11	67	178839	168.57	ug/L	93
25) Tert-amyl alcohol	6.96	59	473539	3116.57	ug/L	98
26) tetrahydrofuran	6.19	42	262917	337.93	ug/L	92
27) Cyclohexane	6.61	56	539654	26.02	ug/L #	75
28) tert-amyl methyl ether (TA	7.08	73	184277	17.29	ug/L	91
30) methyl methacrylate	7.87	69	159548	90.54	ug/L	91
31) Methylcyclohexane	7.81	55	404883	28.07	ug/L	95
32) 1,4-dioxane	7.89	88	49049	2285.68	ug/L	94
33) Methyl isobutyl ketone(mib	8.50	43	484718	183.55	ug/L	100
34) ethyl methacrylate	8.85	69	358716	88.98	ug/L	95
35) 2-hexanone	9.09	43	654091	365.64	ug/L	98
37) 5-Methyl-3-heptanone	10.43	43	182834	63.69	ug/L	87
38) cyclohexanone	10.29	55	227581	548.65	ug/L	96
39) t-1,4-dichloro-2-butene	10.43	75	66555	100.86	ug/L #	62
40) Ethyl amyl ketone	10.75	57	74751	30.13	ug/L #	76
41) Pentachloroethane	10.80	167	16302	6.50	ug/L	95
42) benzyl chloride	11.09	91	137109	32.55	ug/L	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL14.D Vial: 14
 Acq On : 29 Jul 2017 7:31 pm Operator: MGC
 Sample : 1713390-CCV4 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:27 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL43.D
 Acq On : 30 Jul 2017 6:36 am
 Sample : 1713390-CCV5
 Misc : 1 VO-109-70505;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 30 6:50 2017

Vial: 43
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	149661	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	220506	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	59847	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	44183	10.11	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	101.10%
31) Toluene d8 SMC#2	8.60	98	269097	9.88	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.80%
49) Bromofluorobenzene SMC#3	10.34	95	84272	9.43	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.30%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	259579	34.86	ug/L	95
3) Chloromethane	1.94	50	339276	24.10	ug/L	100
4) Vinyl chloride	2.07	62	313202	27.93	ug/L #	68
5) Bromomethane	2.44	94	92930	15.27	ug/L #	90
6) Chloroethane	2.56	64	207757	26.98	ug/L	96
7) Trichlorofluoromethane	2.86	101	292323	31.71	ug/L	98
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	191420	30.25	ug/L #	85
9) 1,1-Dichloroethene	3.51	61	359734	29.79	ug/L	95
10) Methylene chloride	4.15	84	171508	26.56	ug/L	94
11) MTBE	4.48	73	239021	26.45	ug/L #	77
12) T-1,2-dichloroethene	4.50	96	211086	28.15	ug/L	92
13) 1,1-Dichloroethane	5.05	63	443159	27.67	ug/L	99
14) 2,2-Dichloropropane	5.83	77	281843	31.27	ug/L	85
15) Cis-1,2-dichloroethene	5.82	96	217059	27.77	ug/L	96
16) Bromochloromethane	6.18	128	70118	28.15	ug/L #	88
17) Chloroform	6.32	83	323263	28.53	ug/L	94
18) 1,1,1-Trichloroethane	6.53	97	298976	30.48	ug/L #	70
19) 1,1-Dichloropropene	6.72	75	288485	28.16	ug/L	94
20) Carbon tetrachloride	6.71	119	211037	31.38	ug/L	94
22) 1,2-Dichloroethane	7.00	62	180508	29.65	ug/L #	87
23) Benzene	6.94	78	844565	27.56	ug/L #	8
25) Trichloroethene	7.60	130	233439	30.83	ug/L	87
26) 1,2-Dichloropropane	7.83	63	231334	27.65	ug/L	96
27) Dibromomethane	7.90	93	60841	28.81	ug/L	91
28) Bromodichloromethane	8.05	83	191619	30.19	ug/L	91
29) 2-ceve	8.27	63	226798	104.97	ug/L #	80
30) Cis-1,3-dichloropropene	8.40	75	227633	28.72	ug/L	91
32) Toluene	8.65	92	567935	29.73	ug/L	92
33) Trans-1,3-dichloropropene	8.82	75	156592	30.27	ug/L #	87
34) 1,1,2-Trichloroethane	8.96	97	95529	27.83	ug/L	84
35) Tetrachloroethene (PCE)	9.03	166	252636	34.82	ug/L	92
36) 1,3-Dichloropropane	9.08	76	155952	27.97	ug/L	94
37) Dibromochloromethane	9.23	129	102923	31.03	ug/L #	95
38) 1,2-Dibromoethane	9.32	107	79952	28.03	ug/L	95
40) Chlorobenzene	9.64	112	559537	28.19	ug/L	89
41) 1,1,1,2-Tetrachloroethane	9.69	131	154541	31.64	ug/L	98
42) Ethylbenzene	9.69	106	341150	29.26	ug/L	83
43) P+m-Xylene	9.77	106	824911	57.83	ug/L	100
44) O-Xylene	10.01	106	382478	29.02	ug/L	91
45) Styrene	10.02	104	600706	29.90	ug/L	93
46) Bromoform	10.15	173	43106	29.34	ug/L #	100
47) Isopropylbenzene	10.22	105	1022532	29.97	ug/L	97
48) 1,1,2,2-Tetrachloroethane	10.40	83	89372	27.46	ug/L	90
50) 1,2,3-Trichloropropene	10.45	110	21810	31.52	ug/L #	12
51) n-propylbenzene	10.48	91	1241564	28.02	ug/L	91

(#) = qualifier out of range (m) = manual integration
 29JUL43.D 82605.M Sun Jul 30 06:57:37 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL43.D Vial: 43
 Acq On : 30 Jul 2017 6:36 am Operator: MGC
 Sample : 1713390-CCV5 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 6:50 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

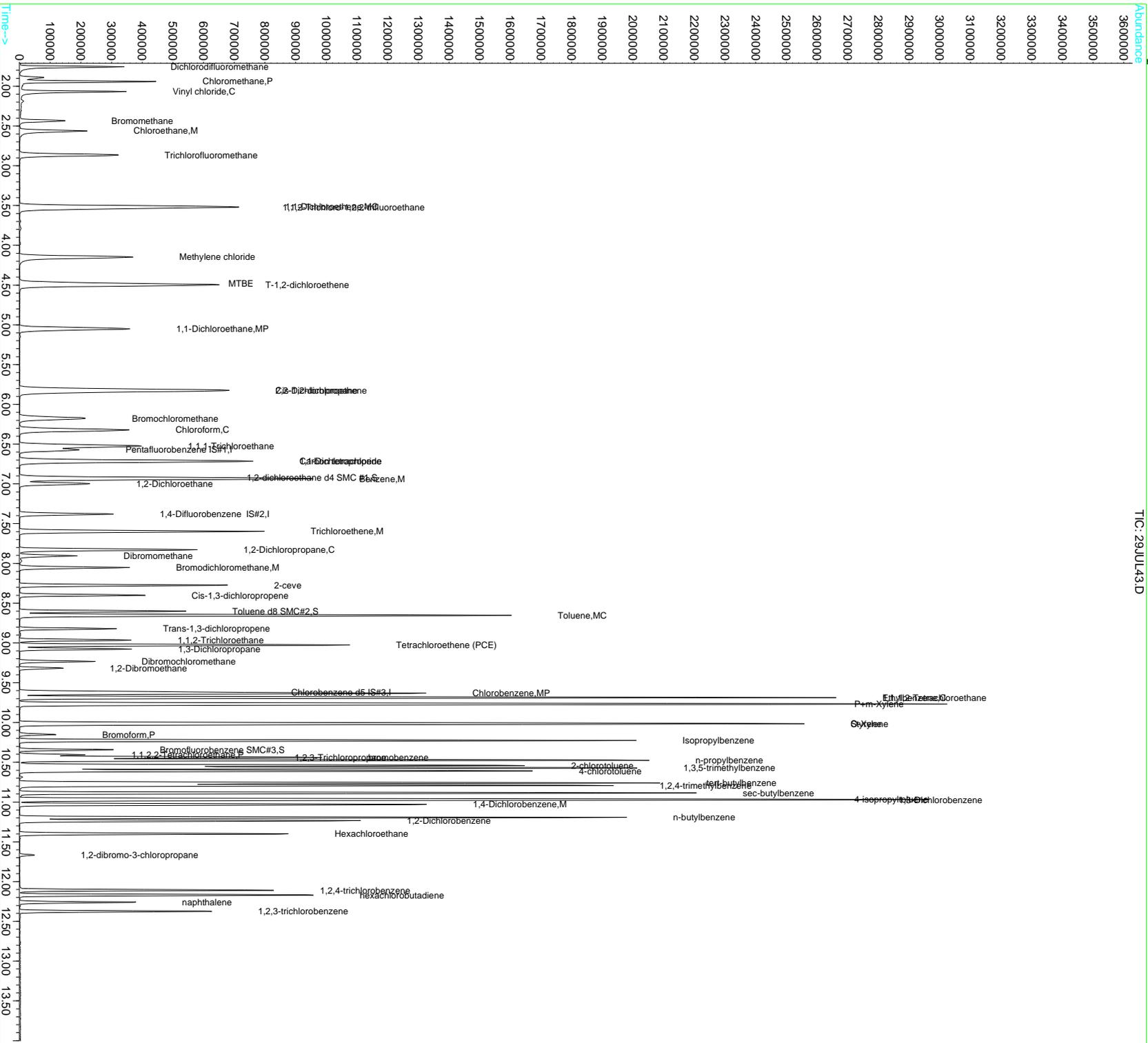
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	202355	28.95	ug/L	94
53) 1,3,5-trimethylbenzene	10.57	105	858608	30.41	ug/L	92
54) 2-chlorotoluene	10.54	91	824759	29.46	ug/L	98
55) 4-chlorotoluene	10.61	91	744191	29.44	ug/L	98
56) tert-butylbenzene	10.76	119	813904	29.18	ug/L	97
57) 1,2,4-trimethylbenzene	10.79	105	811432	29.02	ug/L	94
58) sec-butylbenzene	10.89	105	1152603	30.50	ug/L	100
59) 4-isopropyltoluene	10.97	119	938193	30.44	ug/L	97
60) 1,3-Dichlorobenzene	10.98	146	451796	30.20	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	448237	30.65	ug/L	94
62) n-butylbenzene	11.19	91	829073	28.87	ug/L	98
63) 1,2-Dichlorobenzene	11.23	146	378896	29.36	ug/L	96
64) Hexachloroethane	11.40	117	116739	22.62	ug/L #	71
65) 1,2-dibromo-3-chloropropan	11.67	75	11561	26.35	ug/L	92
66) 1,2,4-trichlorobenzene	12.11	180	205722	27.52	ug/L	96
67) hexachlorobutadiene	12.17	225	163626	31.62	ug/L #	87
68) naphthalene	12.26	128	231724	24.68	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	161453	25.74	ug/L #	89

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL43.D
Acq On : 30 Jul 2017 6:36 am
Sample : 1713390-CCV5
Misc : 1 VO-109-70505;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 6:50 2017

Vial: 43
Operator: MGC
Inst: MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL44.D Vial: 44
 Acq On : 30 Jul 2017 6:59 am Operator: MGC
 Sample : 1713390-CCV6 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 30 7:23 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

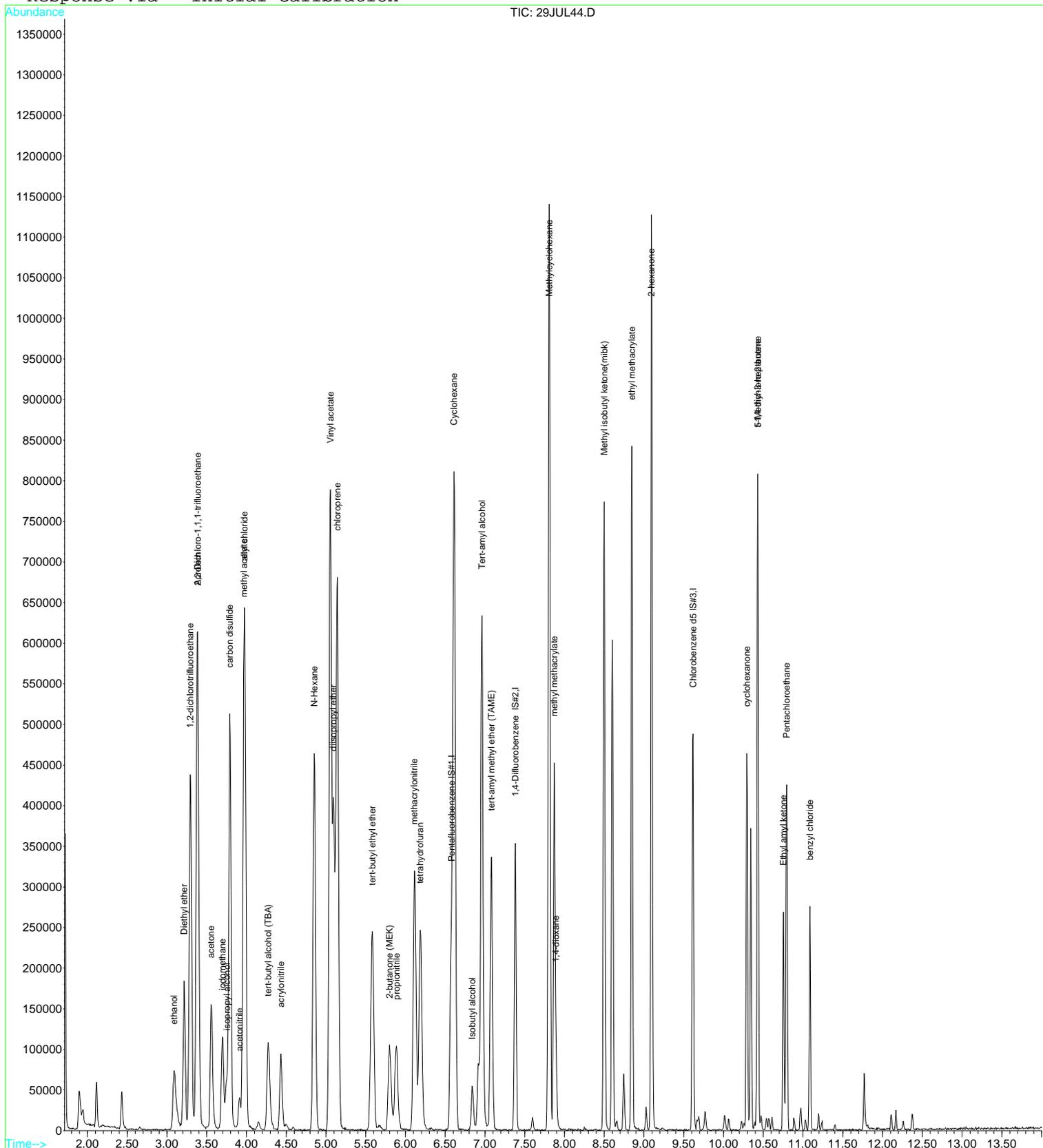
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	177980	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	260201	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	68974	10.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.09	45	124787	3888.39	ug/L #	72
3) 2,2-Dichloro-1,1,1-trifluo	3.39	83	405455	24.02	ug/L #	87
4) 1,2-dichlorotrifluoroethan	3.29	67	277817	23.69	ug/L #	74
5) Diethyl ether	3.22	59	111512	25.06	ug/L	92
6) isopropyl alcohol	3.75	45	117243	792.56	ug/L #	1
7) Acrolein	3.39	56	79062	243.76	ug/L	86
8) acetone	3.56	43	221598	302.16	ug/L	97
9) tert-butyl alcohol (TBA)	4.27	59	163501	776.47	ug/L	100
10) acetonitrile	3.91	41	52179	149.40	ug/L	97
11) methyl acetate	3.96	43	540687	244.80	ug/L	93
12) allyl chloride	3.98	41	530194	29.70	ug/L	100
13) iodomethane	3.70	142	152210	14.51	ug/L	95
14) acrylonitrile	4.43	53	88739	73.39	ug/L	92
15) carbon disulfide	3.79	76	772082	28.61	ug/L	100
16) N-Hexane	4.85	57	286595	25.05	ug/L	88
17) diisopropyl ether	5.09	87	94140	14.15	ug/L	96
18) Vinyl acetate	5.06	43	1553453	149.55	ug/L	97
19) chloroprene	5.14	53	578330	30.82	ug/L	98
20) tert-butyl ethyl ether	5.58	59	312674	14.37	ug/L	98
21) 2-butanone (MEK)	5.80	43	186202	143.00	ug/L	88
22) propionitrile	5.89	54	167011	382.04	ug/L #	88
23) Isobutyl alcohol	6.84	43	44188	438.12	ug/L #	45
24) methacrylonitrile	6.11	67	169247	142.02	ug/L	95
25) Tert-amyl alcohol	6.96	59	428161	2508.67	ug/L	97
26) tetrahydrofuran	6.19	42	252167	288.54	ug/L	93
27) Cyclohexane	6.61	56	553414	23.76	ug/L #	75
28) tert-amyl methyl ether (TA	7.09	73	170342	14.23	ug/L	95
30) methyl methacrylate	7.87	69	145568	74.93	ug/L	85
31) Methylcyclohexane	7.81	55	424439	26.69	ug/L	97
32) 1,4-dioxane	7.89	88	43816	1852.13	ug/L	94
33) Methyl isobutyl ketone(mib	8.50	43	447928	153.86	ug/L	99
34) ethyl methacrylate	8.85	69	328186	73.85	ug/L	94
35) 2-hexanone	9.09	43	608925	308.77	ug/L	99
37) 5-Methyl-3-heptanone	10.43	43	169066	53.51	ug/L	86
38) cyclohexanone	10.29	55	177976	389.88	ug/L	99
39) t-1,4-dichloro-2-butene	10.43	75	35667	49.12	ug/L	73
40) Ethyl amyl ketone	10.75	57	66286	24.28	ug/L	75
41) Pentachloroethane	10.79	167	53552	19.41	ug/L	99
42) benzyl chloride	11.09	91	145360	31.46	ug/L	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL44.D Vial: 44
Acq On : 30 Jul 2017 6:59 am Operator: MGC
Sample : 1713390-CCV6 Inst : MS-V5
Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 30 7:23 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL02.D
 Acq On : 30 Jul 2017 8:08 am
 Sample : 1713392-CCV1
 Misc : 1 VO-109-70505;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 30 8:22 2017

Vial: 2
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	167572	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	248081	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	61943	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	48438	9.90	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	99.00%
31) Toluene d8 SMC#2	8.60	98	302885	9.89	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.90%
49) Bromofluorobenzene SMC#3	10.34	95	96687	10.45	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	104.50%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	236506	28.36	ug/L	96
3) Chloromethane	1.94	50	316694	20.09	ug/L	99
4) Vinyl chloride	2.07	62	297279	23.67	ug/L #	66
5) Bromomethane	2.44	94	104617	15.36	ug/L #	89
6) Chloroethane	2.56	64	192166	22.29	ug/L	96
7) Trichlorofluoromethane	2.86	101	277064	26.85	ug/L	95
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	182857	25.81	ug/L #	85
9) 1,1-Dichloroethene	3.51	61	332213	24.57	ug/L	95
10) Methylene chloride	4.15	84	165213	22.85	ug/L	94
11) MTBE	4.49	73	225506	22.29	ug/L #	75
12) T-1,2-dichloroethene	4.50	96	201645	24.02	ug/L	93
13) 1,1-Dichloroethane	5.05	63	418803	23.36	ug/L	99
14) 2,2-Dichloropropane	5.83	77	260675	25.83	ug/L	87
15) Cis-1,2-dichloroethene	5.82	96	205242	23.45	ug/L	95
16) Bromochloromethane	6.17	128	67084	24.05	ug/L #	89
17) Chloroform	6.32	83	302784	23.87	ug/L	94
18) 1,1,1-Trichloroethane	6.53	97	275415	25.08	ug/L #	73
19) 1,1-Dichloropropene	6.72	75	275945	24.05	ug/L	94
20) Carbon tetrachloride	6.71	119	199245	26.46	ug/L	94
22) 1,2-Dichloroethane	7.00	62	175252	25.71	ug/L #	89
23) Benzene	6.93	78	796718	23.22	ug/L #	9
25) Trichloroethene	7.60	130	224858	26.39	ug/L	86
26) 1,2-Dichloropropane	7.82	63	224602	23.86	ug/L	97
27) Dibromomethane	7.90	93	59598	25.09	ug/L	93
28) Bromodichloromethane	8.05	83	179356	25.11	ug/L	89
29) 2-ceve	8.27	63	220136	90.56	ug/L #	78
30) Cis-1,3-dichloropropene	8.40	75	222726	24.98	ug/L	93
32) Toluene	8.65	92	537933	25.03	ug/L	92
33) Trans-1,3-dichloropropene	8.82	75	155278	26.68	ug/L #	86
34) 1,1,2-Trichloroethane	8.97	97	91390	23.67	ug/L	84
35) Tetrachloroethene (PCE)	9.03	166	231850	28.40	ug/L	93
36) 1,3-Dichloropropane	9.08	76	147832	23.57	ug/L	94
37) Dibromochloromethane	9.23	129	101057	27.08	ug/L #	94
38) 1,2-Dibromoethane	9.32	107	77964	24.29	ug/L	99
40) Chlorobenzene	9.63	112	537842	26.18	ug/L	89
41) 1,1,1,2-Tetrachloroethane	9.69	131	146988	29.08	ug/L	96
42) Ethylbenzene	9.69	106	326293	27.04	ug/L	82
43) P+m-Xylene	9.77	106	796070	53.92	ug/L	100
44) O-Xylene	10.01	106	361075	26.47	ug/L	91
45) Styrene	10.02	104	569933	27.41	ug/L	93
46) Bromoform	10.15	173	42141	27.72	ug/L #	100
47) Isopropylbenzene	10.23	105	969089	27.44	ug/L	96
48) 1,1,2,2-Tetrachloroethane	10.40	83	84702	25.15	ug/L	95
50) 1,2,3-Trichloropropene	10.45	110	19997	27.93	ug/L #	19
51) n-propylbenzene	10.47	91	1187638	25.90	ug/L	92

(#) = qualifier out of range (m) = manual integration

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL02.D Vial: 2
 Acq On : 30 Jul 2017 8:08 am Operator: MGC
 Sample : 1713392-CCV1 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 8:22 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

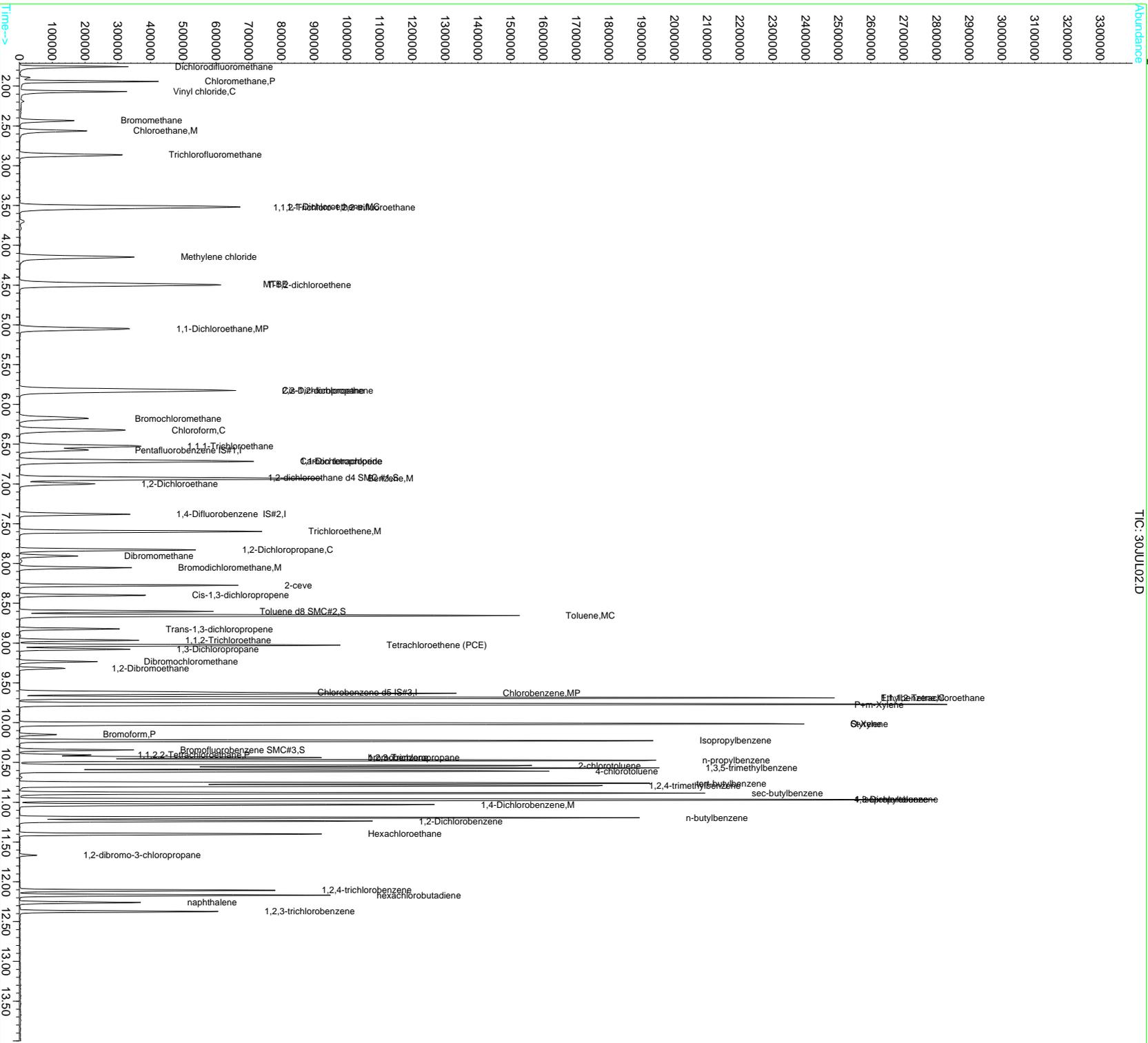
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	193927	26.81	ug/L	92
53) 1,3,5-trimethylbenzene	10.57	105	814879	27.88	ug/L	92
54) 2-chlorotoluene	10.54	91	785662	27.12	ug/L	99
55) 4-chlorotoluene	10.61	91	727505	27.81	ug/L	98
56) tert-butylbenzene	10.76	119	852694	29.54	ug/L	90
57) 1,2,4-trimethylbenzene	10.79	105	770116	26.61	ug/L	93
58) sec-butylbenzene	10.89	105	1098814	28.09	ug/L	99
59) 4-isopropyltoluene	10.96	119	884139	27.72	ug/L	96
60) 1,3-Dichlorobenzene	10.97	146	433211	27.98	ug/L	93
61) 1,4-Dichlorobenzene	11.04	146	425862	28.14	ug/L	95
62) n-butylbenzene	11.19	91	784958	26.41	ug/L	99
63) 1,2-Dichlorobenzene	11.23	146	359511	26.91	ug/L #	96
64) Hexachloroethane	11.40	117	121710	22.77	ug/L #	71
65) 1,2-dibromo-3-chloropropan	11.67	75	10313	22.71	ug/L	96
66) 1,2,4-trichlorobenzene	12.11	180	200356	25.90	ug/L	97
67) hexachlorobutadiene	12.17	225	155397	29.01	ug/L #	87
68) naphthalene	12.26	128	219762	22.61	ug/L	100
69) 1,2,3-trichlorobenzene	12.37	180	152671	23.51	ug/L #	89

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL02.D
Acq On : 30 Jul 2017 8:08 am
Sample : 1713392-CCV1
Misc : 1 VO-109-70505;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 8:22 2017

Vial: 2
Operator: MGC
Inst: MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL03.D Vial: 3
 Acq On : 30 Jul 2017 8:31 am Operator: MGC
 Sample : 1713392-CCV2 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 9:03 2017 Quant Results File: 82605X.RES

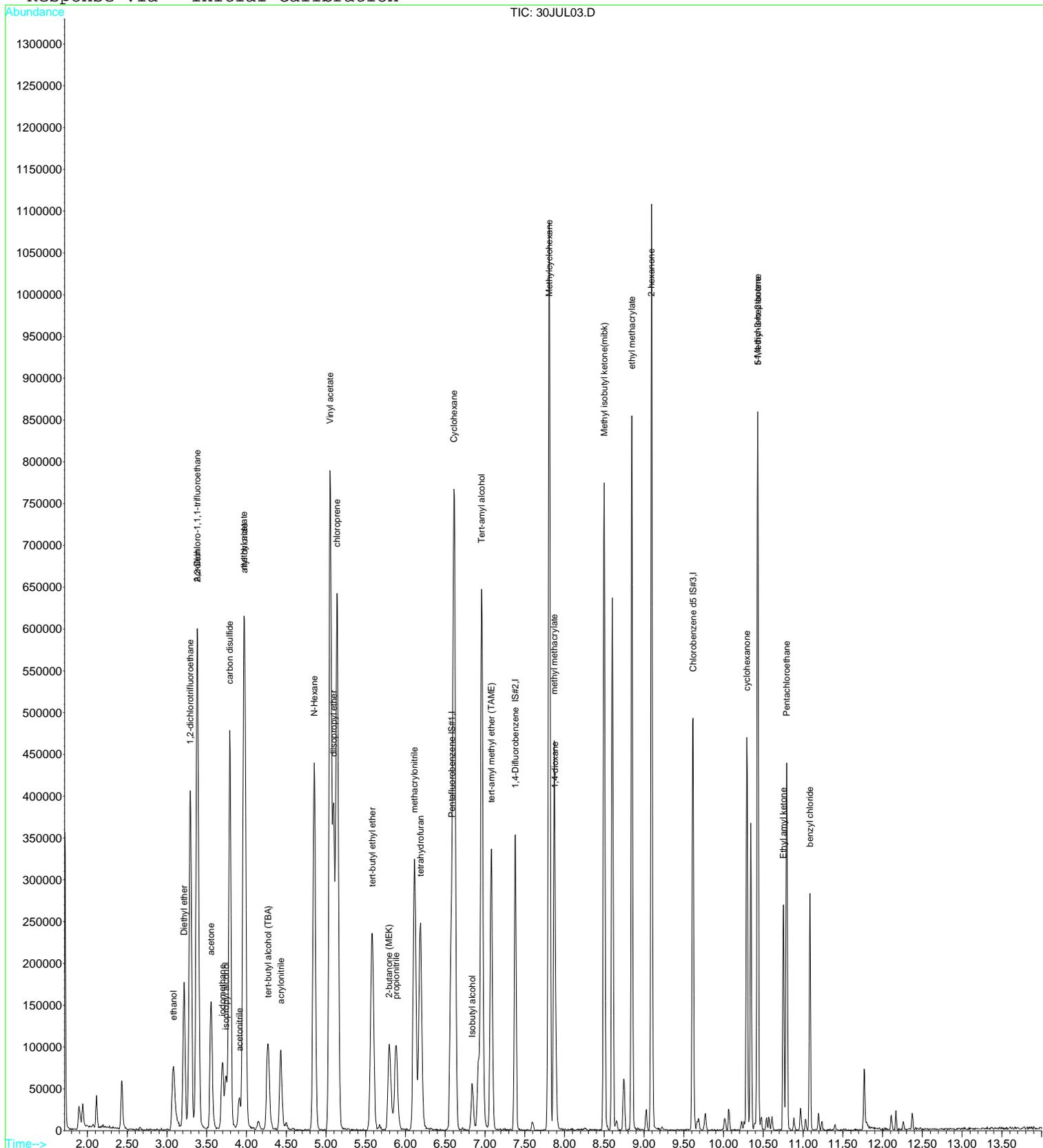
Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	185319	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	262555	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	69677	10.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.08	45	128236	3837.62	ug/L #	74
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	386628	22.00	ug/L #	89
4) 1,2-dichlorotrifluoroethan	3.29	67	262688	21.51	ug/L #	75
5) Diethyl ether	3.22	59	110656	23.88	ug/L	89
6) isopropyl alcohol	3.74	45	114604	744.04	ug/L #	1
7) Acrolein	3.39	56	81968	242.71	ug/L	90
8) acetone	3.55	43	221177	289.64	ug/L	97
9) tert-butyl alcohol (TBA)	4.27	59	159770	728.70	ug/L	100
10) acetonitrile	3.91	41	50121	137.82	ug/L	98
11) methyl acetate	3.96	43	557844	242.57	ug/L	94
12) allyl chloride	3.98	41	517918	27.86	ug/L	99
13) iodomethane	3.70	142	111776	10.23	ug/L	96
14) acrylonitrile	4.43	53	89028	70.71	ug/L	91
15) carbon disulfide	3.79	76	728130	25.92	ug/L	100
16) N-Hexane	4.85	57	267404	22.45	ug/L	87
17) diisopropyl ether	5.10	87	90650	13.09	ug/L	97
18) Vinyl acetate	5.05	43	1534732	141.89	ug/L	98
19) chloroprene	5.14	53	538567	27.56	ug/L	96
20) tert-butyl ethyl ether	5.58	59	306991	13.55	ug/L	96
21) 2-butanone (MEK)	5.79	43	189393	139.69	ug/L	88
22) propionitrile	5.88	54	161852	355.58	ug/L #	89
23) Isobutyl alcohol	6.84	43	41476	394.94	ug/L #	29
24) methacrylonitrile	6.11	67	166295	134.02	ug/L	93
25) Tert-amyl alcohol	6.96	59	429090	2414.55	ug/L	98
26) tetrahydrofuran	6.19	42	254848	280.06	ug/L	95
27) Cyclohexane	6.61	56	531957	21.93	ug/L #	76
28) tert-amyl methyl ether (TA	7.08	73	168573	13.52	ug/L	95
30) methyl methacrylate	7.87	69	147801	75.40	ug/L	88
31) Methylcyclohexane	7.81	55	401872	25.04	ug/L	96
32) 1,4-dioxane	7.88	88	46929	1965.93	ug/L	91
33) Methyl isobutyl ketone(mib	8.50	43	454471	154.71	ug/L	100
34) ethyl methacrylate	8.85	69	330928	73.80	ug/L	96
35) 2-hexanone	9.09	43	598228	300.62	ug/L	98
37) 5-Methyl-3-heptanone	10.43	43	171861	53.85	ug/L	87
38) cyclohexanone	10.29	55	184062	399.14	ug/L	97
39) t-1,4-dichloro-2-butene	10.43	75	46776	63.76	ug/L #	69
40) Ethyl amyl ketone	10.75	57	68296	24.76	ug/L	76
41) Pentachloroethane	10.79	167	53843	19.32	ug/L	99
42) benzyl chloride	11.09	91	143193	30.74	ug/L	96

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL03.D Vial: 3
 Acq On : 30 Jul 2017 8:31 am Operator: MGC
 Sample : 1713392-CCV2 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 9:03 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL33.D
 Acq On : 30 Jul 2017 8:01 pm
 Sample : 1713392-CCV4
 Misc : 1 VO-109-70505;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 30 20:15 2017

Vial: 33
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	166919	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	240311	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	65570	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	48873	10.02	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	100.20%
31) Toluene d8 SMC#2	8.60	98	289061	9.74	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.40%
49) Bromofluorobenzene SMC#3	10.34	95	96180	9.82	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.20%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.75	85	246455	29.67	ug/L	94
3) Chloromethane	1.94	50	319674	20.36	ug/L	99
4) Vinyl chloride	2.07	62	305658	24.43	ug/L #	68
5) Bromomethane	2.43	94	101242	14.92	ug/L #	91
6) Chloroethane	2.56	64	195933	22.81	ug/L	96
7) Trichlorofluoromethane	2.87	101	280628	27.30	ug/L	99
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	179694	25.46	ug/L #	83
9) 1,1-Dichloroethene	3.51	61	335112	24.88	ug/L	94
10) Methylene chloride	4.15	84	162025	22.50	ug/L	94
11) MTBE	4.48	73	230710	22.89	ug/L #	78
12) T-1,2-dichloroethene	4.50	96	196173	23.46	ug/L	95
13) 1,1-Dichloroethane	5.05	63	427648	23.94	ug/L	98
14) 2,2-Dichloropropane	5.83	77	223061	22.19	ug/L	98
15) Cis-1,2-dichloroethene	5.82	96	195722	22.45	ug/L	95
16) Bromochloromethane	6.17	128	65451	23.56	ug/L #	88
17) Chloroform	6.32	83	308598	24.42	ug/L	96
18) 1,1,1-Trichloroethane	6.52	97	284744	26.03	ug/L #	72
19) 1,1-Dichloropropene	6.71	75	271563	23.77	ug/L	94
20) Carbon tetrachloride	6.71	119	196966	26.26	ug/L	91
22) 1,2-Dichloroethane	7.00	62	172850	25.46	ug/L #	85
23) Benzene	6.93	78	775318	22.68	ug/L #	9
25) Trichloroethene	7.59	130	225980	27.38	ug/L	88
26) 1,2-Dichloropropane	7.83	63	223671	24.53	ug/L	97
27) Dibromomethane	7.90	93	59123	25.69	ug/L	93
28) Bromodichloromethane	8.05	83	183917	26.58	ug/L	92
29) 2-ceve	8.28	63	217137	92.21	ug/L #	77
30) Cis-1,3-dichloropropene	8.40	75	219181	25.38	ug/L	96
32) Toluene	8.66	92	532524	25.58	ug/L	92
33) Trans-1,3-dichloropropene	8.82	75	149625	26.54	ug/L #	86
34) 1,1,2-Trichloroethane	8.97	97	91972	24.59	ug/L	84
35) Tetrachloroethene (PCE)	9.02	166	223386	28.25	ug/L	92
36) 1,3-Dichloropropane	9.08	76	144263	23.74	ug/L	93
37) Dibromochloromethane	9.23	129	97556	26.99	ug/L #	93
38) 1,2-Dibromoethane	9.32	107	77205	24.83	ug/L	95
40) Chlorobenzene	9.63	112	529035	24.33	ug/L	90
41) 1,1,1,2-Tetrachloroethane	9.69	131	145364	27.17	ug/L	100
42) Ethylbenzene	9.69	106	316179	24.75	ug/L	86
43) P+m-Xylene	9.77	106	779041	49.85	ug/L	100
44) O-Xylene	10.01	106	367738	25.46	ug/L	90
45) Styrene	10.02	104	564377	25.64	ug/L	94
46) Bromoform	10.15	173	42048	26.12	ug/L #	100
47) Isopropylbenzene	10.23	105	964865	25.81	ug/L	97
48) 1,1,2,2-Tetrachloroethane	10.41	83	81312	22.81	ug/L	96
50) 1,2,3-Trichloropropene	10.45	110	20415	26.93	ug/L #	16
51) n-propylbenzene	10.47	91	1172557	24.15	ug/L	91

(#) = qualifier out of range (m) = manual integration

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL33.D Vial: 33
 Acq On : 30 Jul 2017 8:01 pm Operator: MGC
 Sample : 1713392-CCV4 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 20:15 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

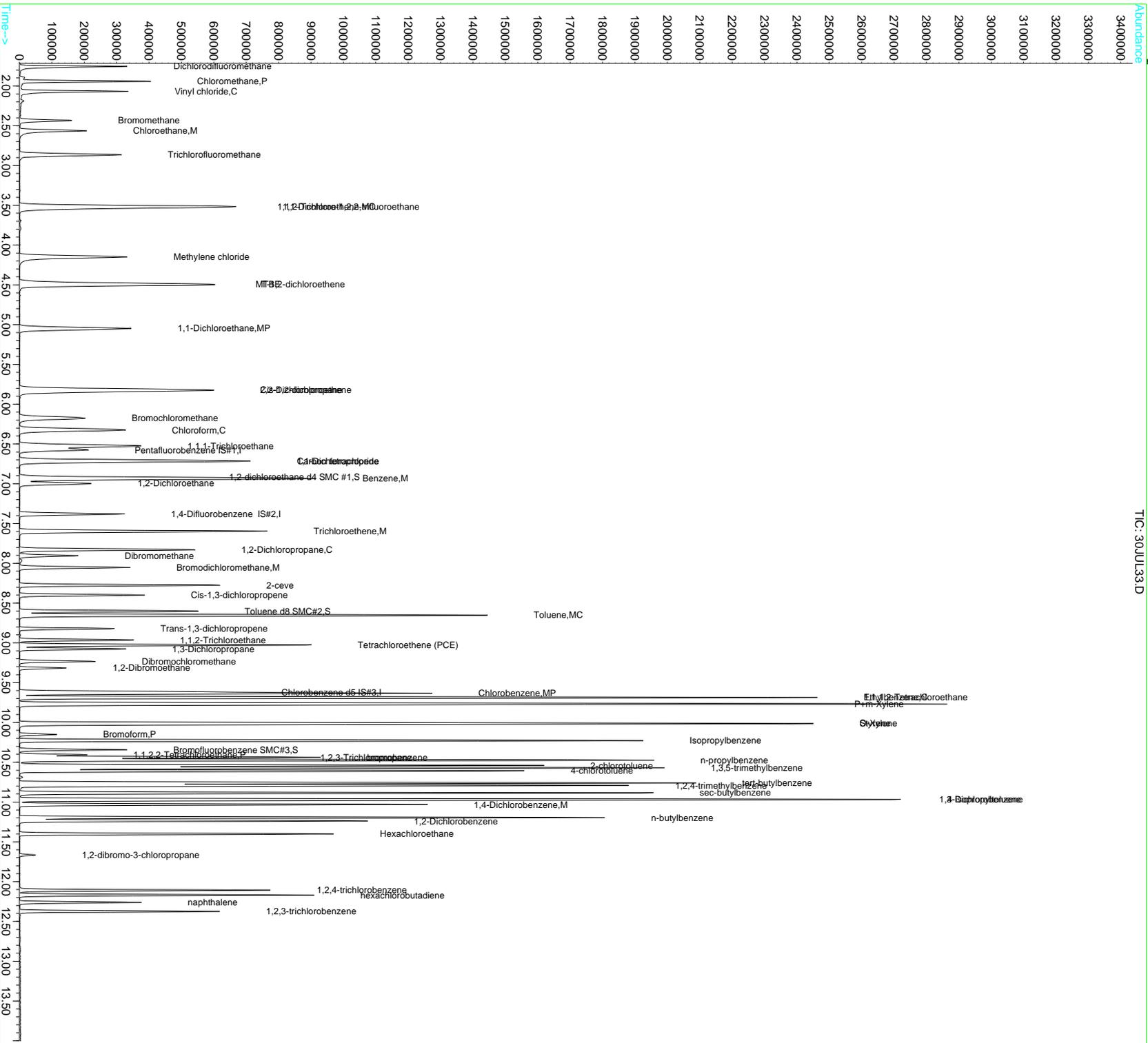
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	192002	25.07	ug/L	94
53) 1,3,5-trimethylbenzene	10.57	105	811586	26.24	ug/L	94
54) 2-chlorotoluene	10.54	91	783150	25.54	ug/L	99
55) 4-chlorotoluene	10.61	91	700075	25.28	ug/L	97
56) tert-butylbenzene	10.76	119	857743	28.07	ug/L	89
57) 1,2,4-trimethylbenzene	10.79	105	763528	24.92	ug/L	95
58) sec-butylbenzene	10.88	105	1075647	25.98	ug/L	99
59) 4-isopropyltoluene	10.97	119	875002	25.91	ug/L	97
60) 1,3-Dichlorobenzene	10.98	146	430266	26.25	ug/L	92
61) 1,4-Dichlorobenzene	11.03	146	413113	25.79	ug/L	95
62) n-butylbenzene	11.20	91	762174	24.22	ug/L	98
63) 1,2-Dichlorobenzene	11.24	146	358283	25.34	ug/L	97
64) Hexachloroethane	11.40	117	123952	21.98	ug/L #	71
65) 1,2-dibromo-3-chloropropan	11.66	75	10952	22.79	ug/L	93
66) 1,2,4-trichlorobenzene	12.11	180	193607	23.64	ug/L	97
67) hexachlorobutadiene	12.17	225	149734	26.41	ug/L #	88
68) naphthalene	12.26	128	221512	21.53	ug/L	100
69) 1,2,3-trichlorobenzene	12.37	180	152592	22.20	ug/L #	87

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL33.D
Acq On : 30 Jul 2017 8:01 pm
Sample : 1713392-CCV4
Misc : 1 VO-109-70505;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 20:15 2017

Vial: 33
Operator: MGC
Inst: MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL34.D Vial: 34
 Acq On : 30 Jul 2017 8:24 pm Operator: MGC
 Sample : 1713392-CCV5 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 31 6:06 2017 Quant Results File: 82605X.RES

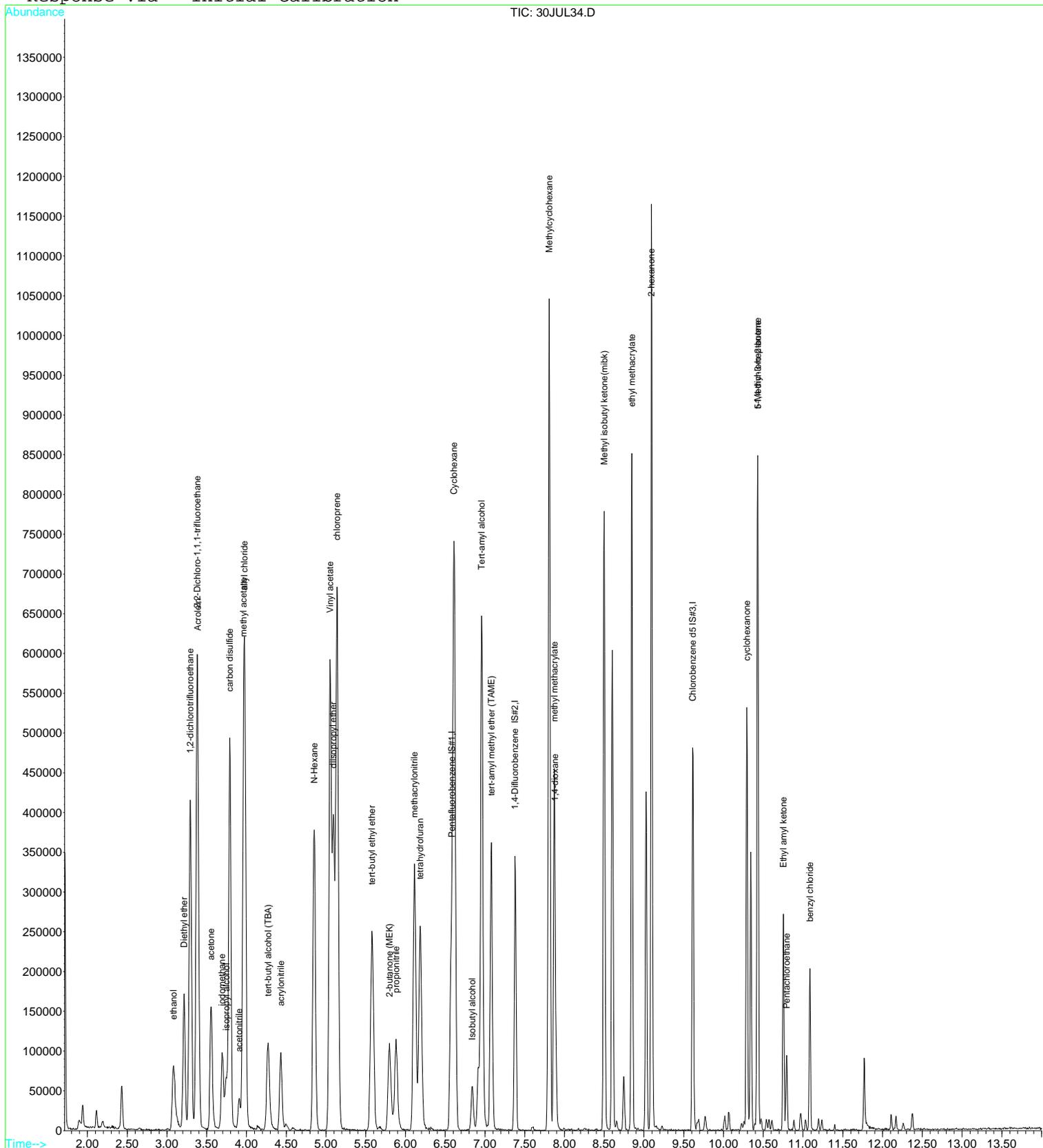
Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	170654	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	246125	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	68243	10.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.08	45	133253	4330.44	ug/L #	74
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	377984	23.36	ug/L #	87
4) 1,2-dichlorotrifluoroethan	3.29	67	262526	23.35	ug/L #	75
5) Diethyl ether	3.22	59	105872	24.81	ug/L	92
6) isopropyl alcohol	3.74	45	122598	864.34	ug/L #	1
7) Acrolein	3.39	56	75843	243.88	ug/L	85
8) acetone	3.56	43	225865	321.20	ug/L	98
9) tert-butyl alcohol (TBA)	4.27	59	165274	818.58	ug/L	100
10) acetonitrile	3.90	41	54902	163.94	ug/L	93
11) methyl acetate	3.96	43	540178	255.07	ug/L	92
12) allyl chloride	3.98	41	525192	30.68	ug/L	99
13) iodomethane	3.69	142	133755	13.30	ug/L	98
14) acrylonitrile	4.43	53	95526	82.39	ug/L	93
15) carbon disulfide	3.79	76	751282	29.04	ug/L	100
16) N-Hexane	4.85	57	236960	21.60	ug/L	88
17) diisopropyl ether	5.09	87	92131	14.45	ug/L	98
18) Vinyl acetate	5.05	43	1191280	119.60	ug/L	99
19) chloroprene	5.14	53	574710	31.94	ug/L	99
20) tert-butyl ethyl ether	5.58	59	311781	14.94	ug/L	98
21) 2-butanone (MEK)	5.80	43	191905	153.70	ug/L	88
22) propionitrile	5.88	54	169440	404.24	ug/L #	88
23) Isobutyl alcohol	6.83	43	44151	456.54	ug/L #	39
24) methacrylonitrile	6.11	67	167212	146.33	ug/L	94
25) Tert-amyl alcohol	6.96	59	428138	2616.22	ug/L	99
26) tetrahydrofuran	6.18	42	257498	307.29	ug/L	95
27) Cyclohexane	6.61	56	514875	23.05	ug/L #	76
28) tert-amyl methyl ether (TA	7.08	73	170588	14.86	ug/L	97
30) methyl methacrylate	7.87	69	146222	79.57	ug/L	86
31) Methylcyclohexane	7.81	55	387331	25.75	ug/L	95
32) 1,4-dioxane	7.88	88	47004	2100.52	ug/L	97
33) Methyl isobutyl ketone(mib	8.50	43	454460	165.03	ug/L	100
34) ethyl methacrylate	8.85	69	333390	79.31	ug/L	93
35) 2-hexanone	9.09	43	608101	325.98	ug/L	97
37) 5-Methyl-3-heptanone	10.43	43	166424	53.24	ug/L	86
38) cyclohexanone	10.29	55	201970	447.18	ug/L	97
39) t-1,4-dichloro-2-butene	10.43	75	53773	74.84	ug/L #	68
40) Ethyl amyl ketone	10.75	57	63878	23.65	ug/L #	81
41) Pentachloroethane	10.79	167	9840	3.60	ug/L	92
42) benzyl chloride	11.09	91	109440	24.58	ug/L	96

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL34.D Vial: 34
 Acq On : 30 Jul 2017 8:24 pm Operator: MGC
 Sample : 1713392-CCV5 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 31 6:06 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration





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Environmental Testing Laboratory Since 1949



Raw Data - CCB

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL65.D
 Acq On : 29 Jul 2017 8:02 am
 Sample : 1713324-CCB3
 Misc : 1 CCB3;25ML

Vial: 65
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 9:33 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	155536	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	236490	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	64189	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	47749	10.51	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	105.10%
31) Toluene d8 SMC#2	8.60	98	285370	9.77	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.70%
49) Bromofluorobenzene SMC#3	10.34	95	87247	9.10	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	91.00%

Target Compounds

Qvalue

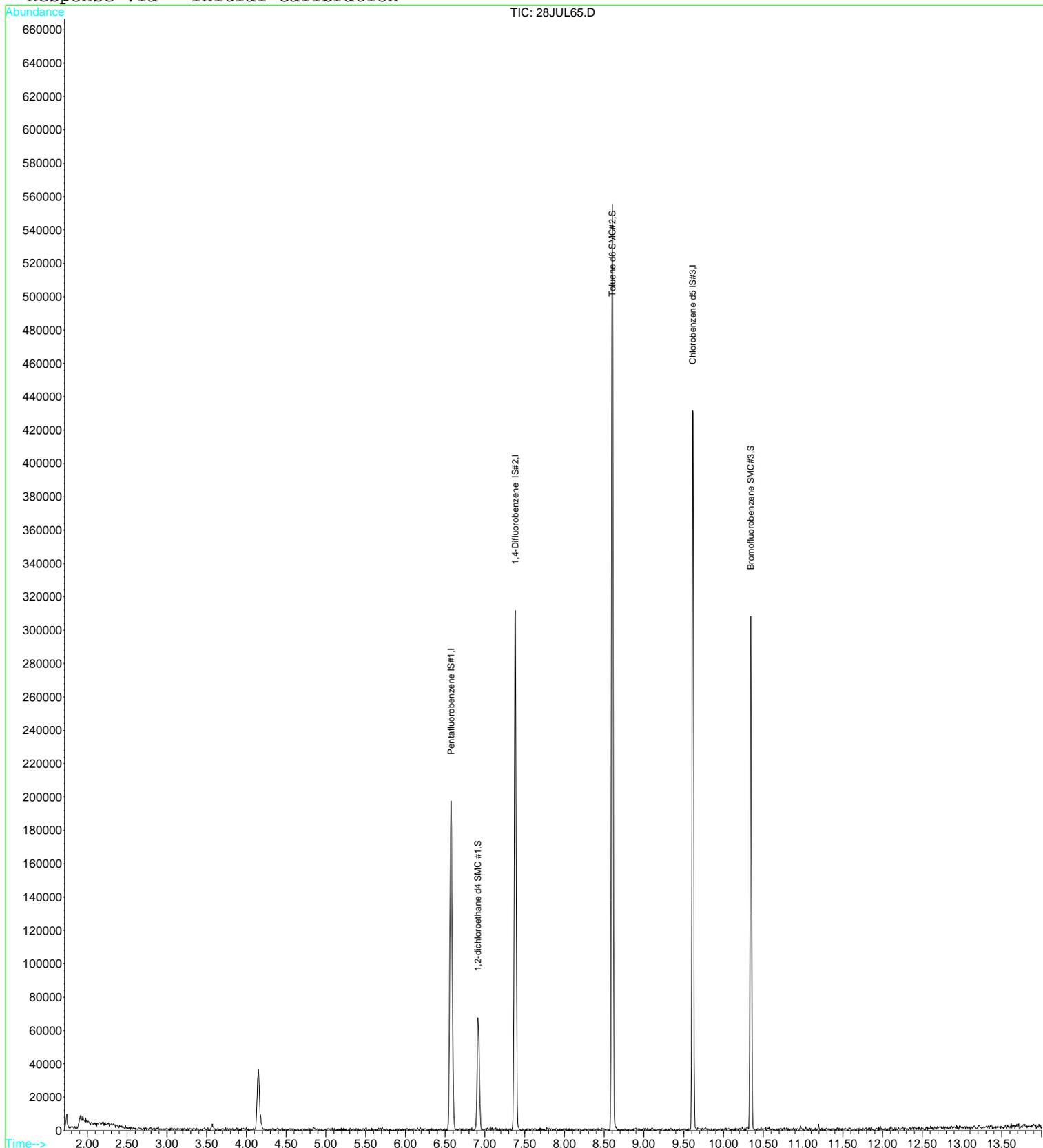
(#) = qualifier out of range (m) = manual integration

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL65.D
 Acq On : 29 Jul 2017 8:02 am
 Sample : 1713324-CCB3
 Misc : 1 CCB3;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:33 2017

Vial: 65
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL65.D Vial: 65
 Acq On : 29 Jul 2017 8:02 am Operator: MGC
 Sample : 1713324-CCB3 Inst : MS-V5
 Misc : 1 CCB3;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:33 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	155536	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	236490	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	64189	10.00	ug/L	0.00

Target Compounds Qvalue

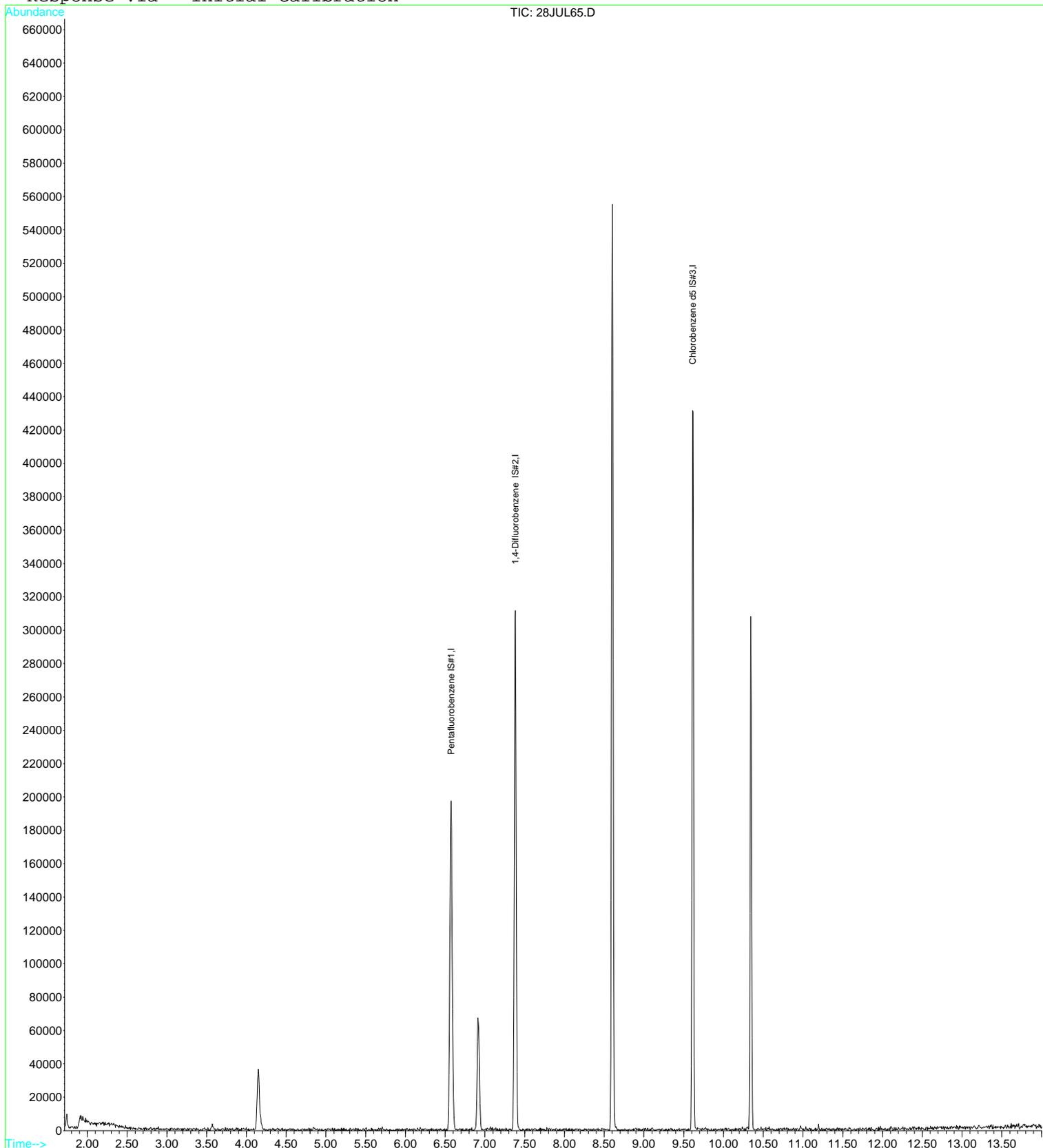
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL65.D
Acq On : 29 Jul 2017 8:02 am
Sample : 1713324-CCB3
Misc : 1 CCB3;25ML
MS Integration Params: rteint.p
Quant Time: Jul 29 9:33 2017

Vial: 65
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL15.D
 Acq On : 29 Jul 2017 7:54 pm
 Sample : 1713390-CCB2
 Misc : 1 CCB2;25ML

Vial: 15
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 30 5:29 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	188729	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	271364	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	71584	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	54812	9.94	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	99.40%
31) Toluene d8 SMC#2	8.60	98	327938	9.79	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.90%
49) Bromofluorobenzene SMC#3	10.34	95	106701	9.98	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.80%

Target Compounds

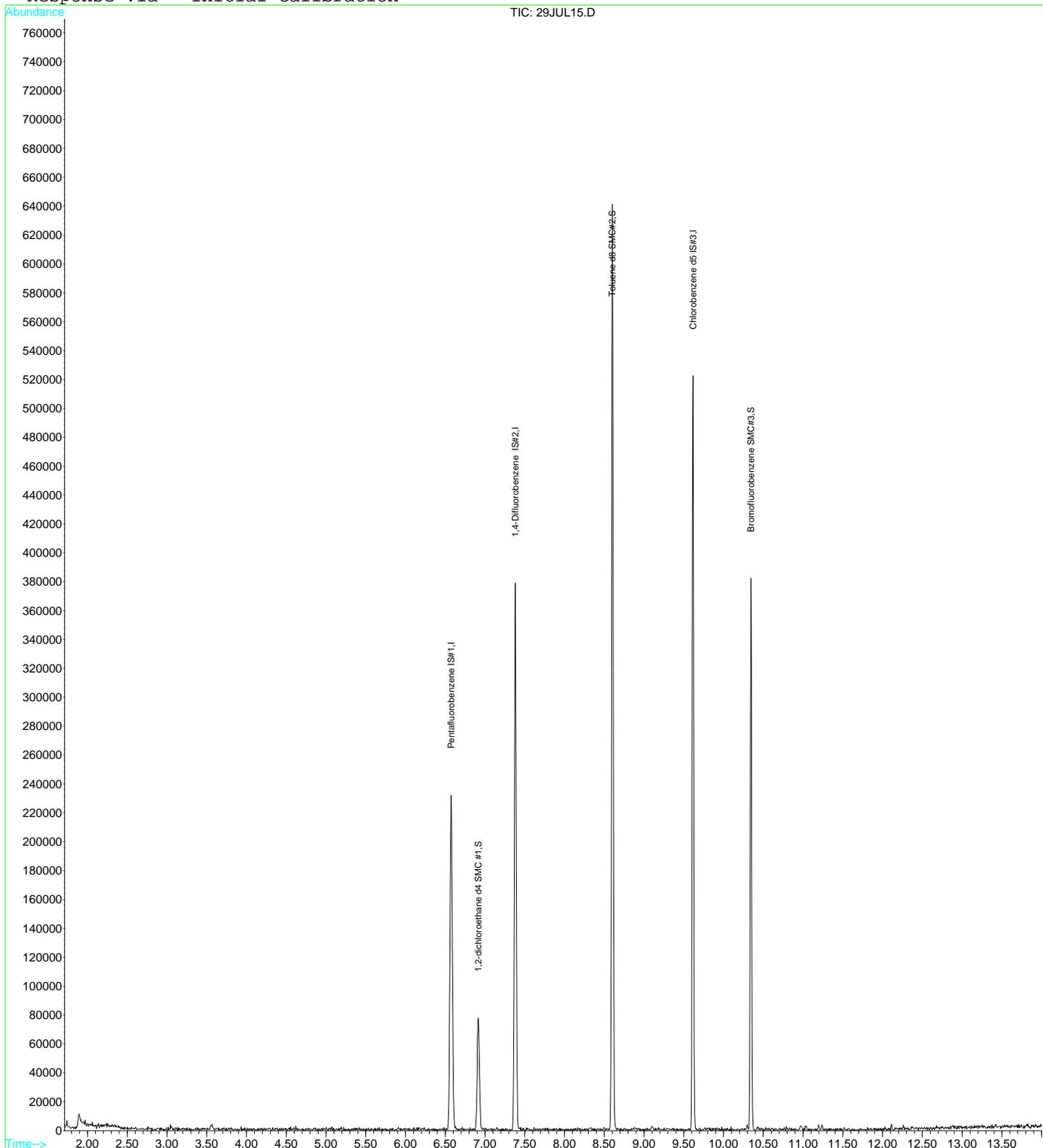
Qvalue

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL15.D
Acq On : 29 Jul 2017 7:54 pm
Sample : 1713390-CCB2
Misc : 1 CCB2;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 5:29 2017

Vial: 15
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL15.D Vial: 15
 Acq On : 29 Jul 2017 7:54 pm Operator: MGC
 Sample : 1713390-CCB2 Inst : MS-V5
 Misc : 1 CCB2;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:29 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	188729	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	271364	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	71584	10.00	ug/L	0.00

Target Compounds Qvalue

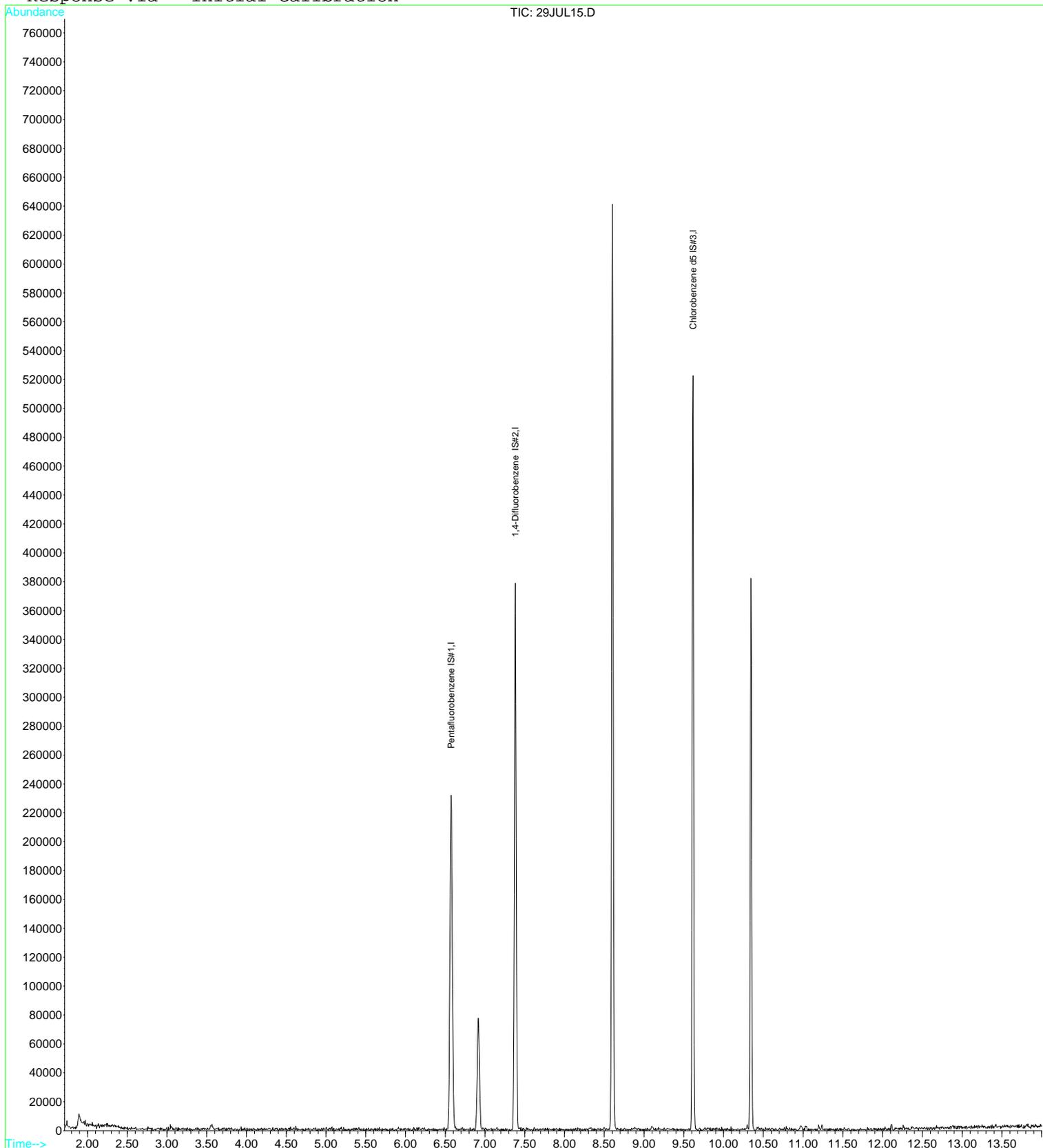
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL15.D
Acq On : 29 Jul 2017 7:54 pm
Sample : 1713390-CCB2
Misc : 1 CCB2;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 5:29 2017

Vial: 15
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL45.D
 Acq On : 30 Jul 2017 7:22 am
 Sample : 1713390-CCB3
 Misc : 1 CCB3;25ML

Vial: 45
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 30 7:37 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172680	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	253784	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	67070	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	52048	10.32	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	103.20%
31) Toluene d8 SMC#2	8.60	98	310326	9.90	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.00%
49) Bromofluorobenzene SMC#3	10.34	95	96448	9.63	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.30%

Target Compounds

Qvalue

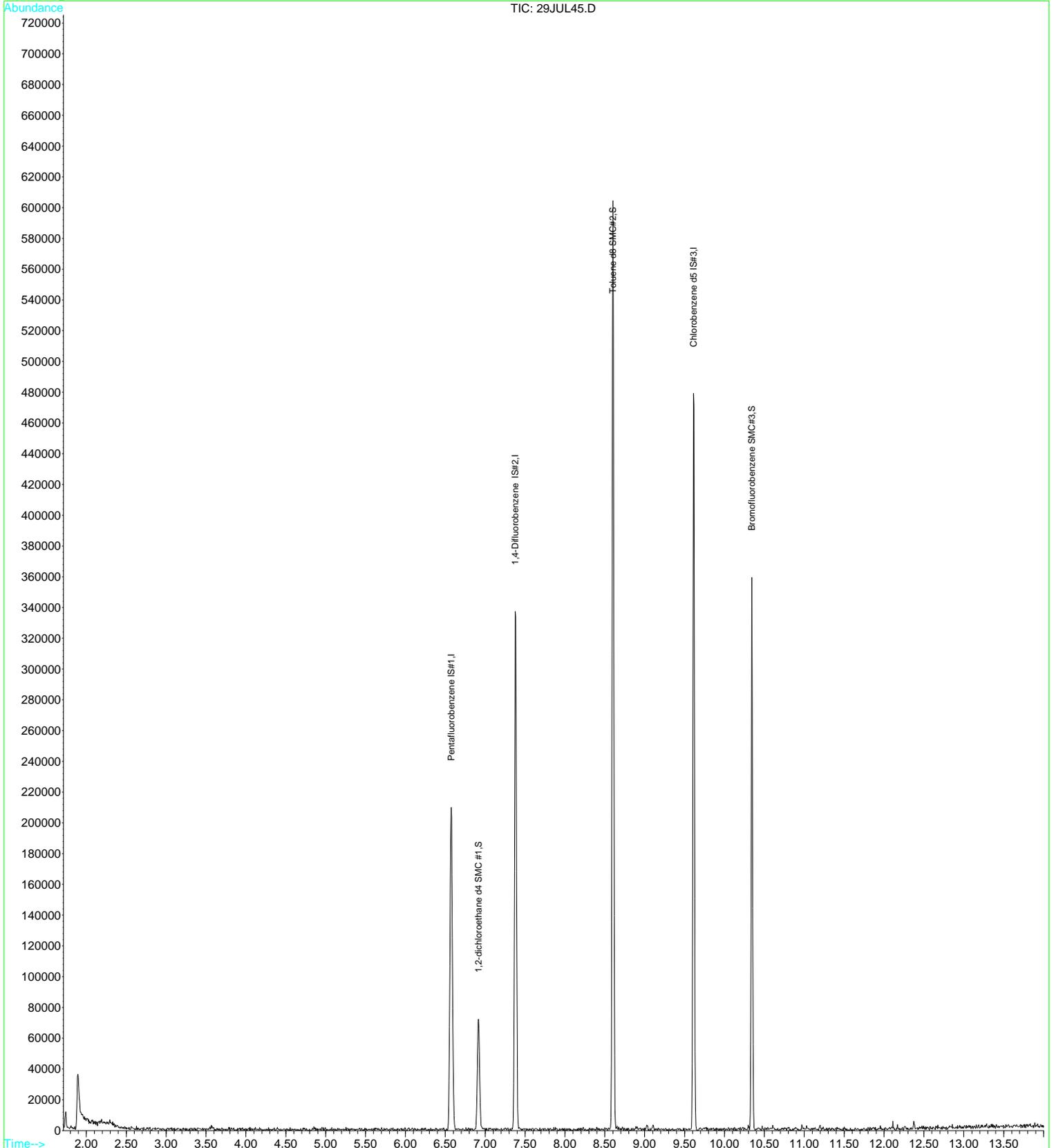
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL45.D
Acq On : 30 Jul 2017 7:22 am
Sample : 1713390-CCB3
Misc : 1 CCB3;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 7:37 2017

Vial: 45
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL45.D Vial: 45
 Acq On : 30 Jul 2017 7:22 am Operator: MGC
 Sample : 1713390-CCB3 Inst : MS-V5
 Misc : 1 CCB3;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 7:37 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172680	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	253784	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	67070	10.00	ug/L	0.00

Target Compounds Qvalue

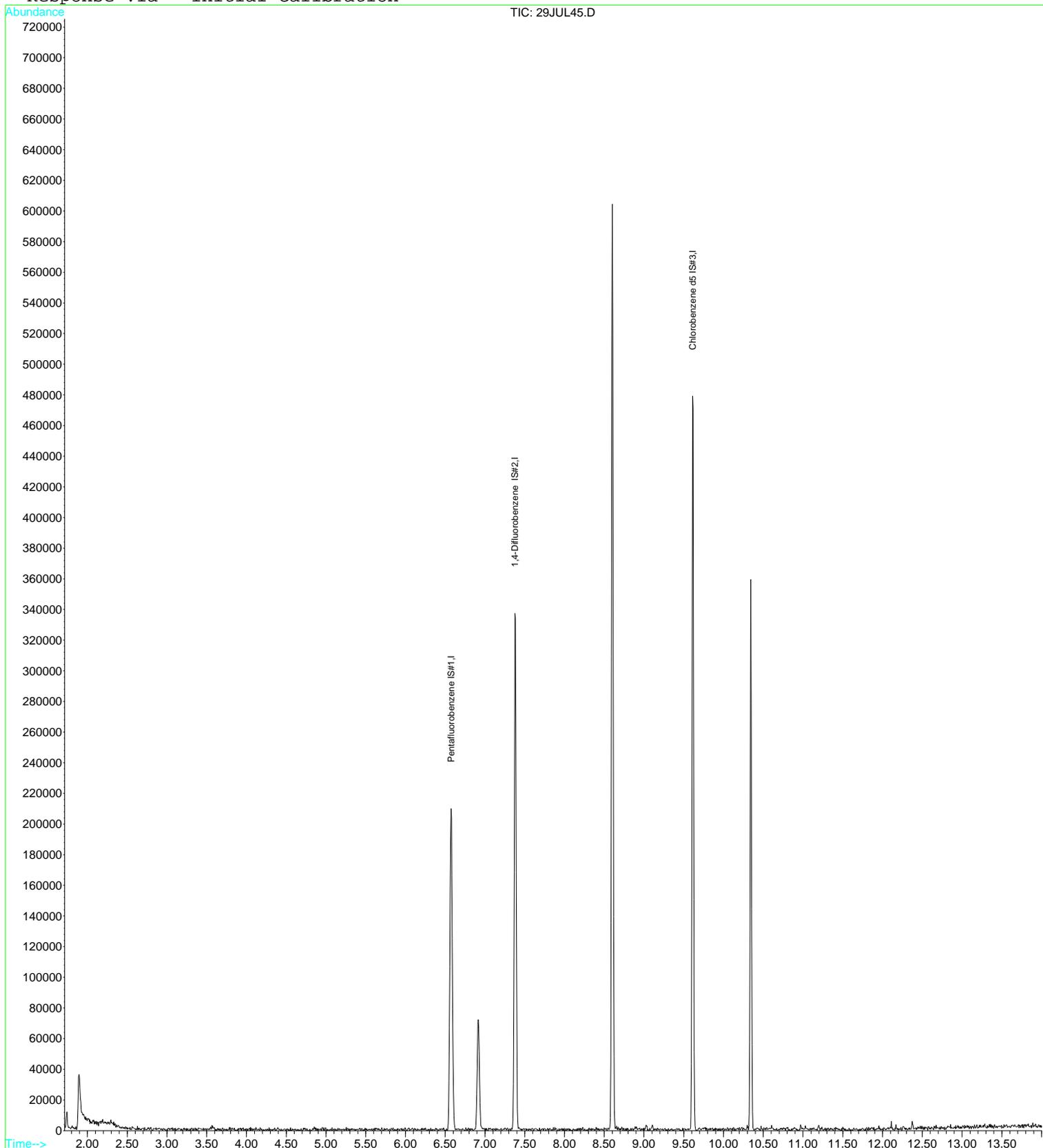
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL45.D
Acq On : 30 Jul 2017 7:22 am
Sample : 1713390-CCB3
Misc : 1 CCB3;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 7:37 2017

Vial: 45
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL05.D
 Acq On : 30 Jul 2017 9:17 am
 Sample : 1713392-CCB1
 Misc : 1 CCB1;25ML

Vial: 5
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 30 10:42 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	188815	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	271859	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	73883	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	53297	9.66	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	96.60%
31) Toluene d8 SMC#2	8.60	98	328156	9.78	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.80%
49) Bromofluorobenzene SMC#3	10.34	95	103807	9.41	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.10%

Target Compounds

Qvalue

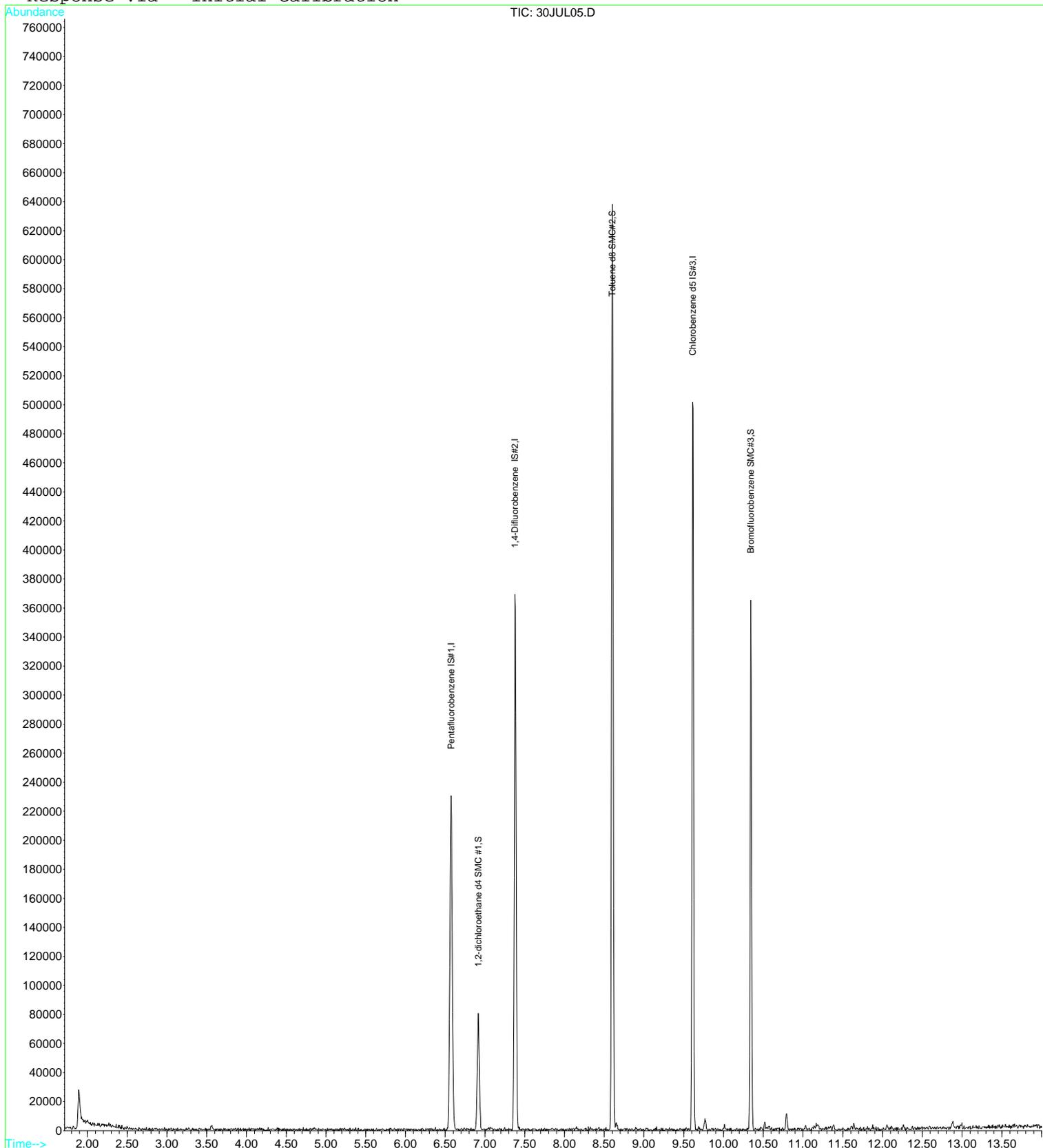
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL05.D
Acq On : 30 Jul 2017 9:17 am
Sample : 1713392-CCB1
Misc : 1 CCB1;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 10:42 2017

Vial: 5
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL05.D
 Acq On : 30 Jul 2017 9:17 am
 Sample : 1713392-CCB1
 Misc : 1 CCB1;25ML

Vial: 5
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 30 10:43 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	188815	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	271859	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	73883	10.00	ug/L	0.00

Target Compounds

Qvalue

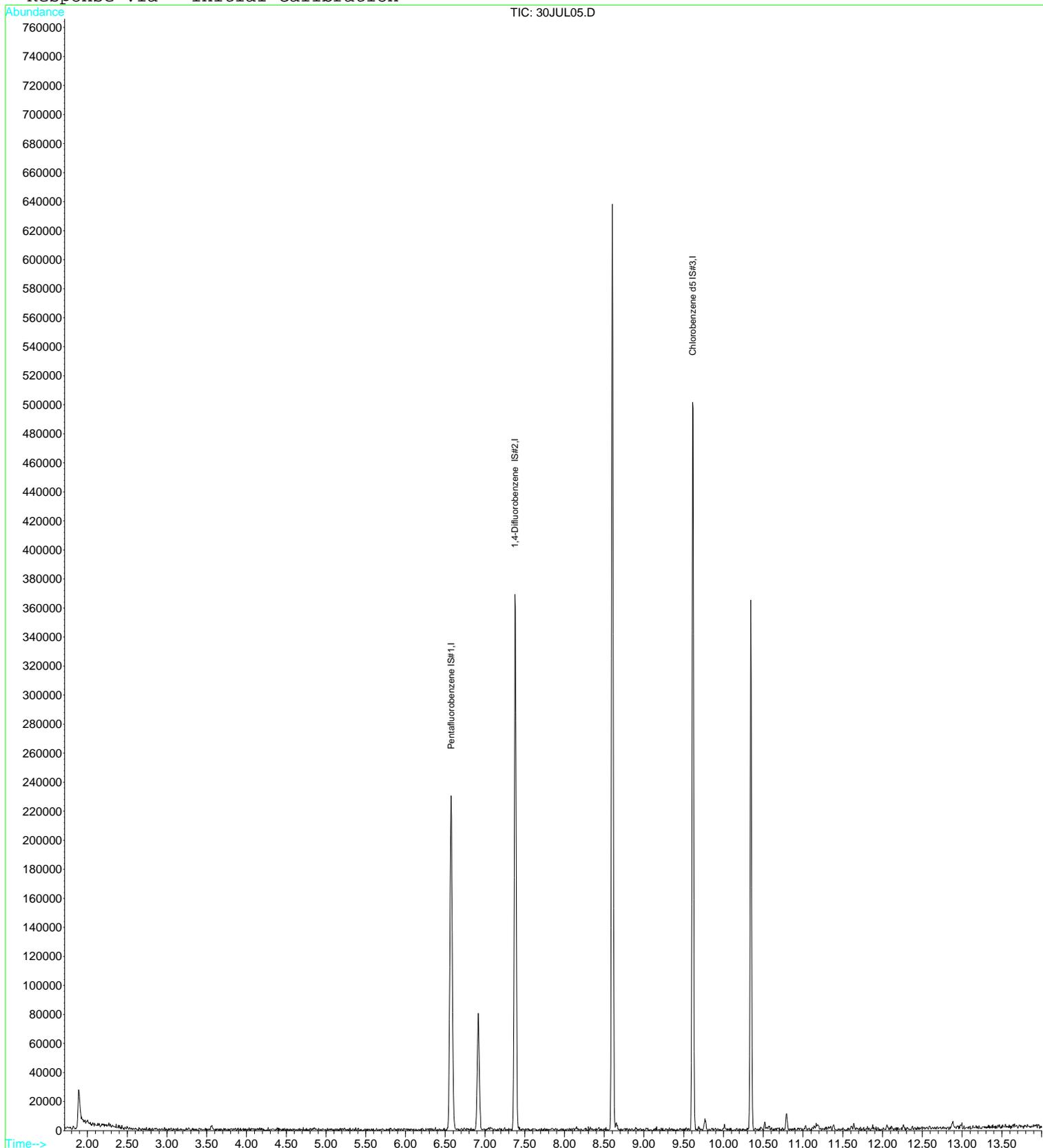
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL05.D
Acq On : 30 Jul 2017 9:17 am
Sample : 1713392-CCB1
Misc : 1 CCB1;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 10:43 2017

Vial: 5
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL05.D
 Acq On : 30 Jul 2017 9:17 am
 Sample : 1713392-CCB1
 Misc : 1 CCB1;25ML

Vial: 5
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 31 8:04 2017

Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Tue Jul 18 07:29:07 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	188815	10.00	ug/L	0.00

System Monitoring Compounds

2) PENTAFLUOROBENZENE S 1	6.57	TIC	482236m	3.99	ug/L	0.00
3) 1,2-DICHLOROETHANE d4 S 2	6.92	TIC	147548m	2.09	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	611128m	4.72	ug/L	-0.01
5) TOLUENE d8 S 4	8.60	TIC	868805m	7.25	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.61	TIC	655786m	7.60	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	443210m	8.20	ug/L	0.00

Target Compounds

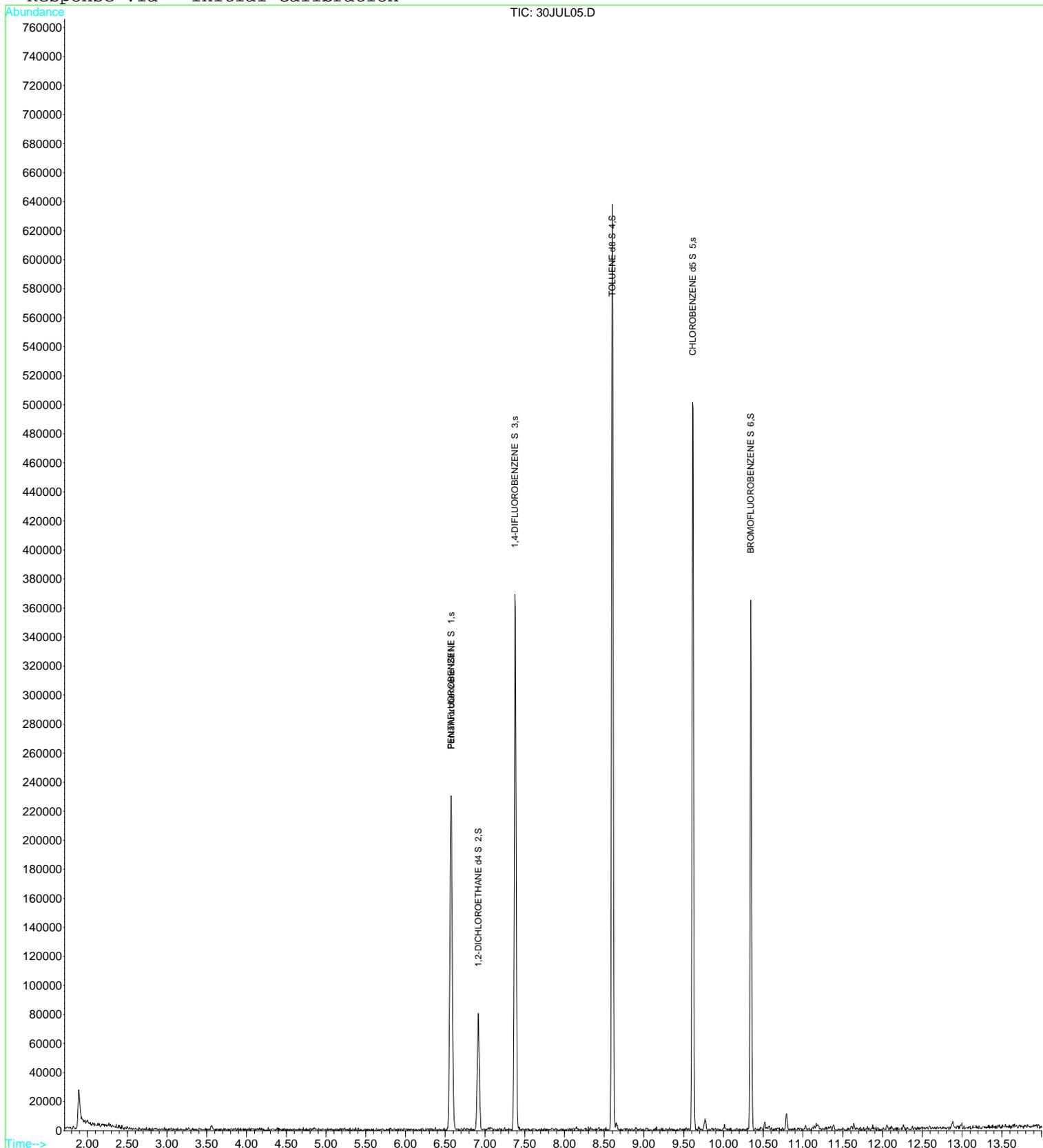
Qvalue

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL05.D
Acq On : 30 Jul 2017 9:17 am
Sample : 1713392-CCB1
Misc : 1 CCB1;25ML
MS Integration Params: rteint.p
Quant Time: Jul 31 8:04 2017

Vial: 5
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\18-0046\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Tue Jul 18 07:29:07 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL36.D
 Acq On : 30 Jul 2017 9:10 pm
 Sample : 1713392-CCB2
 Misc : 1 CCB2;25ML

Vial: 36
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 31 6:40 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172972	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	261190	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	70031	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	49273	9.75	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	97.50%
31) Toluene d8 SMC#2	8.60	98	311669	9.66	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.60%
49) Bromofluorobenzene SMC#3	10.34	95	99697	9.53	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	95.30%

Target Compounds

Qvalue

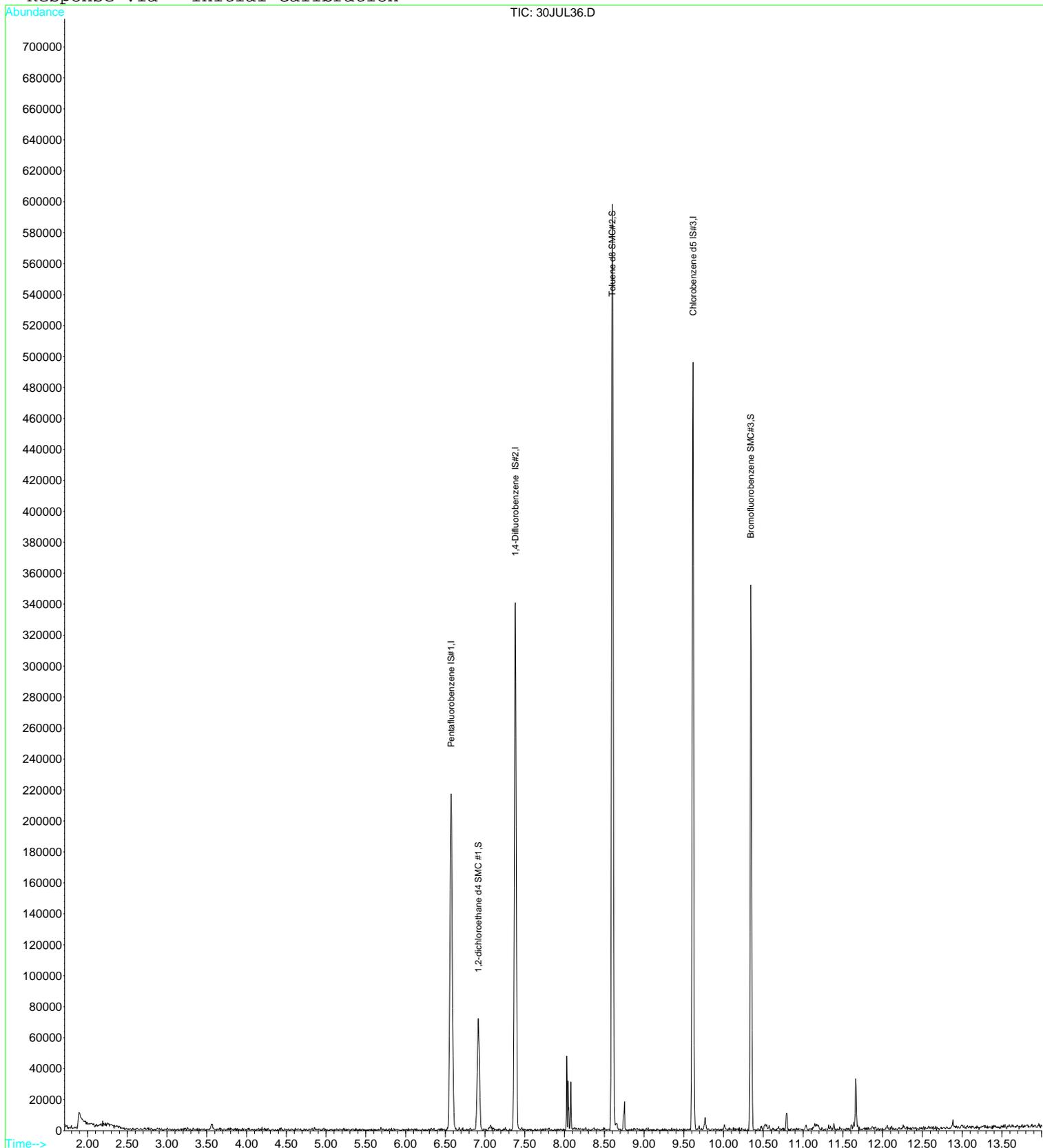
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL36.D
Acq On : 30 Jul 2017 9:10 pm
Sample : 1713392-CCB2
Misc : 1 CCB2;25ML
MS Integration Params: rteint.p
Quant Time: Jul 31 6:40 2017

Vial: 36
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL36.D
 Acq On : 30 Jul 2017 9:10 pm
 Sample : 1713392-CCB2
 Misc : 1 CCB2;25ML

Vial: 36
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 31 6:40 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172972	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	261190	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	70031	10.00	ug/L	0.00

Target Compounds Qvalue

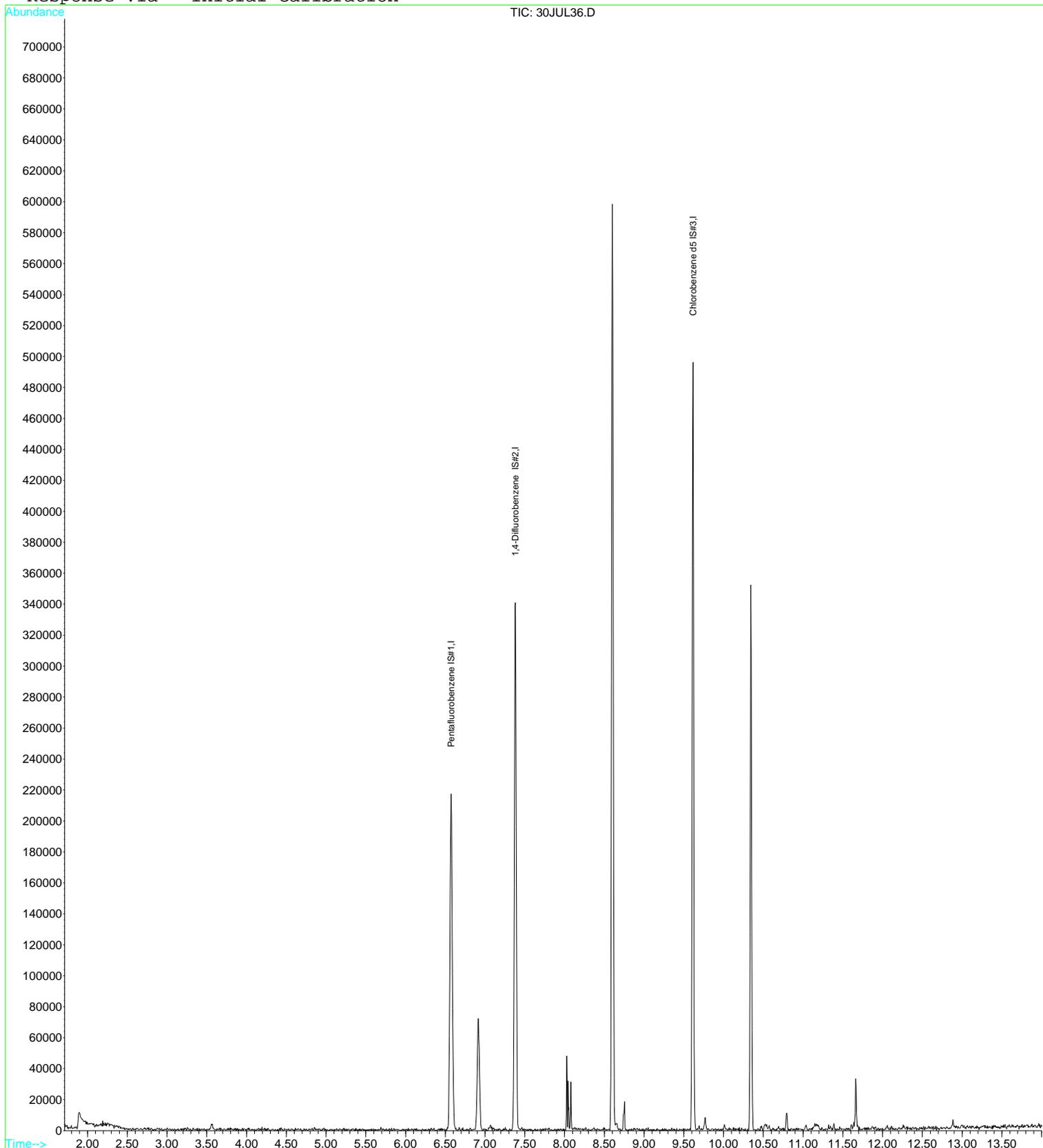
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL36.D
Acq On : 30 Jul 2017 9:10 pm
Sample : 1713392-CCB2
Misc : 1 CCB2;25ML
MS Integration Params: rteint.p
Quant Time: Jul 31 6:40 2017

Vial: 36
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL36.D
 Acq On : 30 Jul 2017 9:10 pm
 Sample : 1713392-CCB2
 Misc : 1 CCB2;25ML

Vial: 36
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 31 8:09 2017

Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Tue Jul 18 07:29:07 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	172972	10.00	ug/L	0.00

System Monitoring Compounds

2) PENTAFLUOROBENZENE S 1	6.57	TIC	451435m	4.08	ug/L	0.00
3) 1,2-DICHLOROETHANE d4 S 2	6.92	TIC	144993m	2.24	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	579516m	4.89	ug/L	0.00
5) TOLUENE d8 S 4	8.60	TIC	835161m	7.61	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.62	TIC	621677m	7.86	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	419248m	8.47	ug/L	0.00

Target Compounds

Qvalue

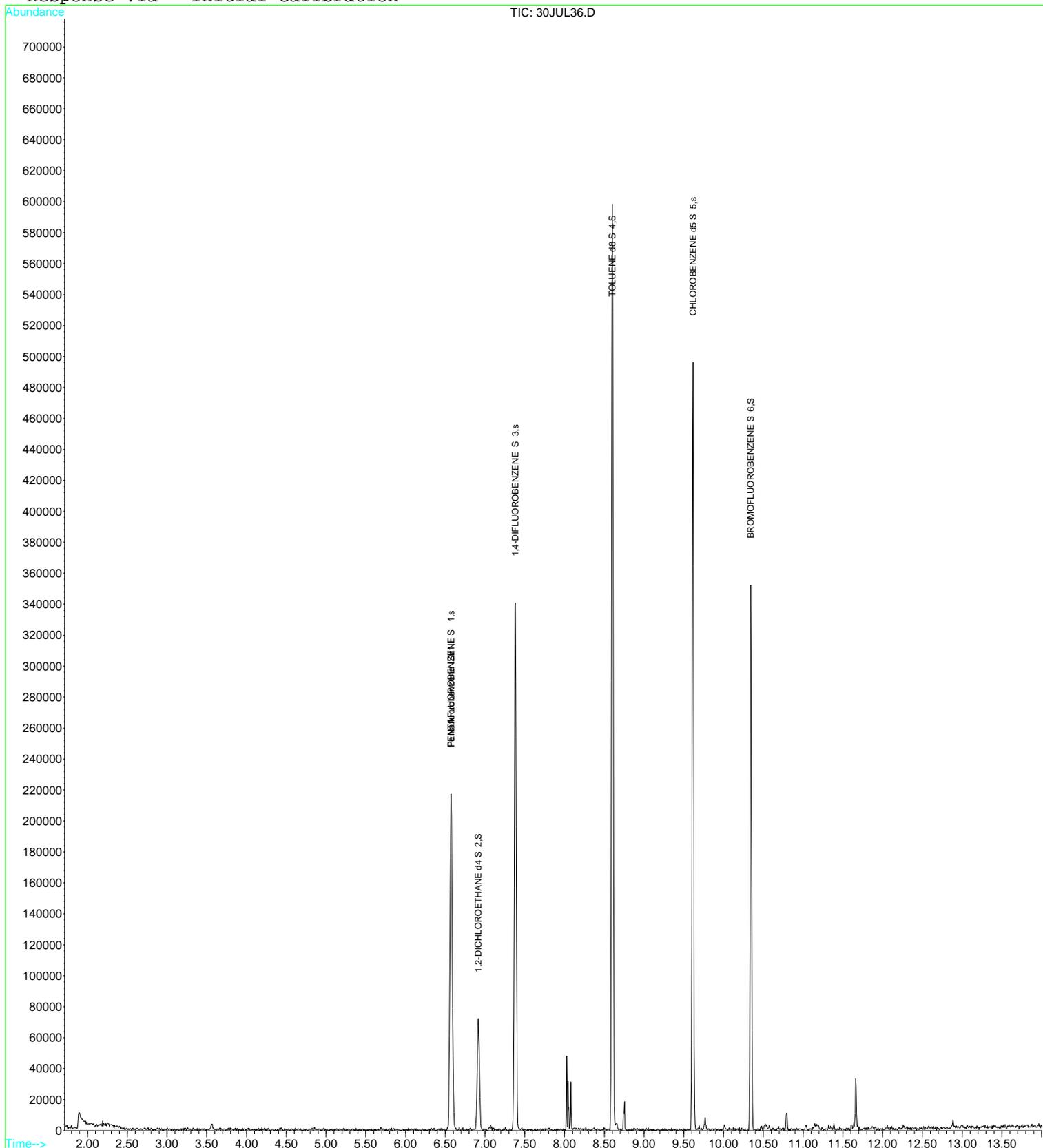
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL36.D
Acq On : 30 Jul 2017 9:10 pm
Sample : 1713392-CCB2
Misc : 1 CCB2;25ML
MS Integration Params: rteint.p
Quant Time: Jul 31 8:09 2017

Vial: 36
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\18-0046\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Tue Jul 18 07:29:07 2017
Response via : Initial Calibration





Raw Data - Tune

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL02.D Vial: 2
 Acq On : 20 Jul 2017 8:09 am Operator: MGC
 Sample : 1712752-TUN1 Inst : MS-V5
 Misc : 1 VO-108-70267;50NG Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 14:23 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	52073	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	84177	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	24018	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	15808	10.14	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	101.40%
31) Toluene d8 SMC#2	8.60	98	102649	9.85	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.50%
49) Bromofluorobenzene SMC#3	10.34	95	29842	8.39	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	83.90%

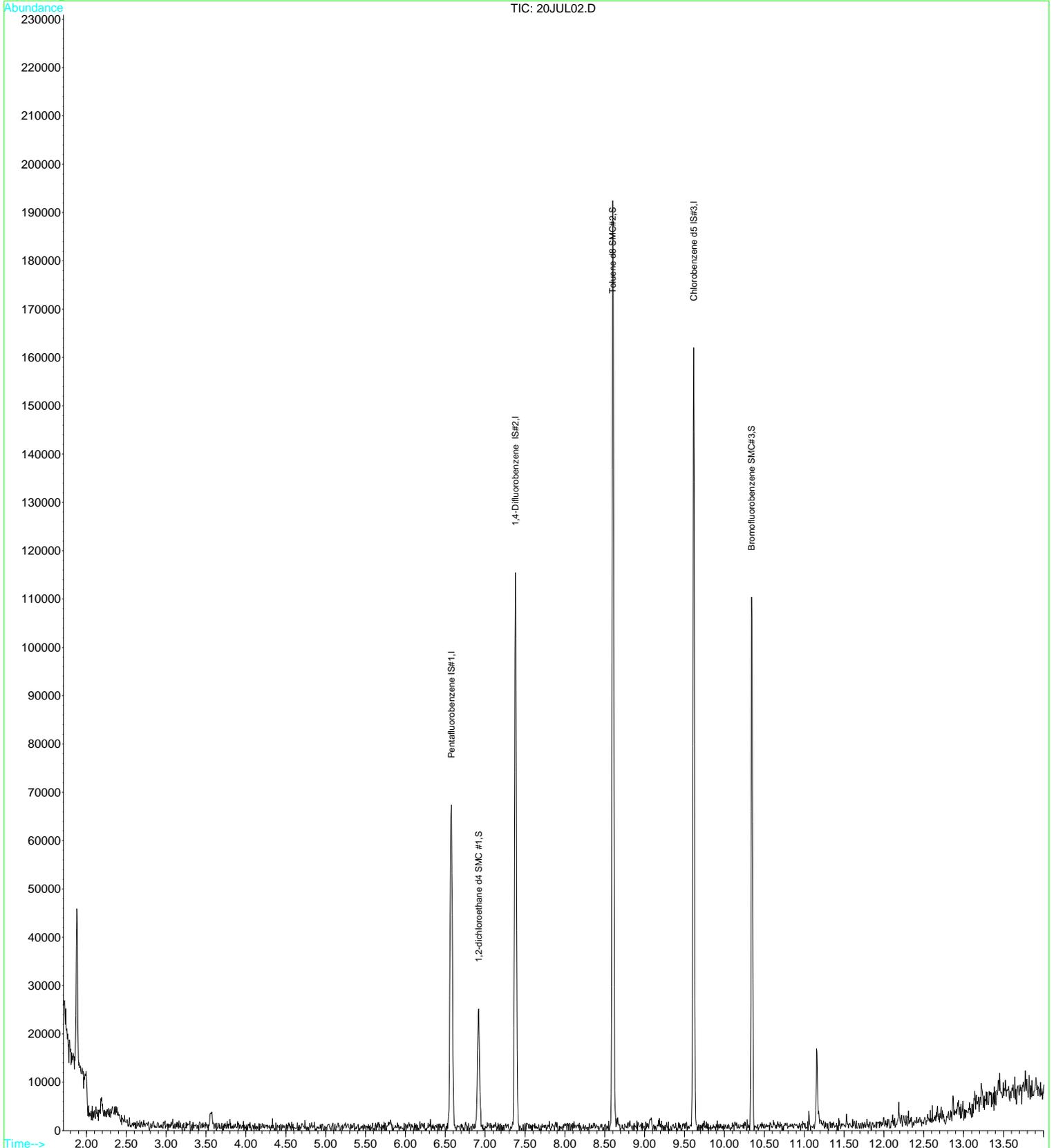
Target Compounds Qvalue

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL02.D
Acq On : 20 Jul 2017 8:09 am
Sample : 1712752-TUN1
Misc : 1 VO-108-70267;50NG
MS Integration Params: rteint.p
Quant Time: Jul 20 14:23 2017

Vial: 2
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL49.D
 Acq On : 17 Jul 2017 11:37 pm
 Sample : 1712538-TUN1
 Misc : 1 VO-108-70267;50NG
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:07 2017

Vial: 49
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	46206	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	85071	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	22393	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	17323	12.52	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	125.20%#
31) Toluene d8 SMC#2	8.60	98	103755	9.86	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.60%
49) Bromofluorobenzene SMC#3	10.35	95	31164	9.40	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.00%

Target Compounds

Qvalue

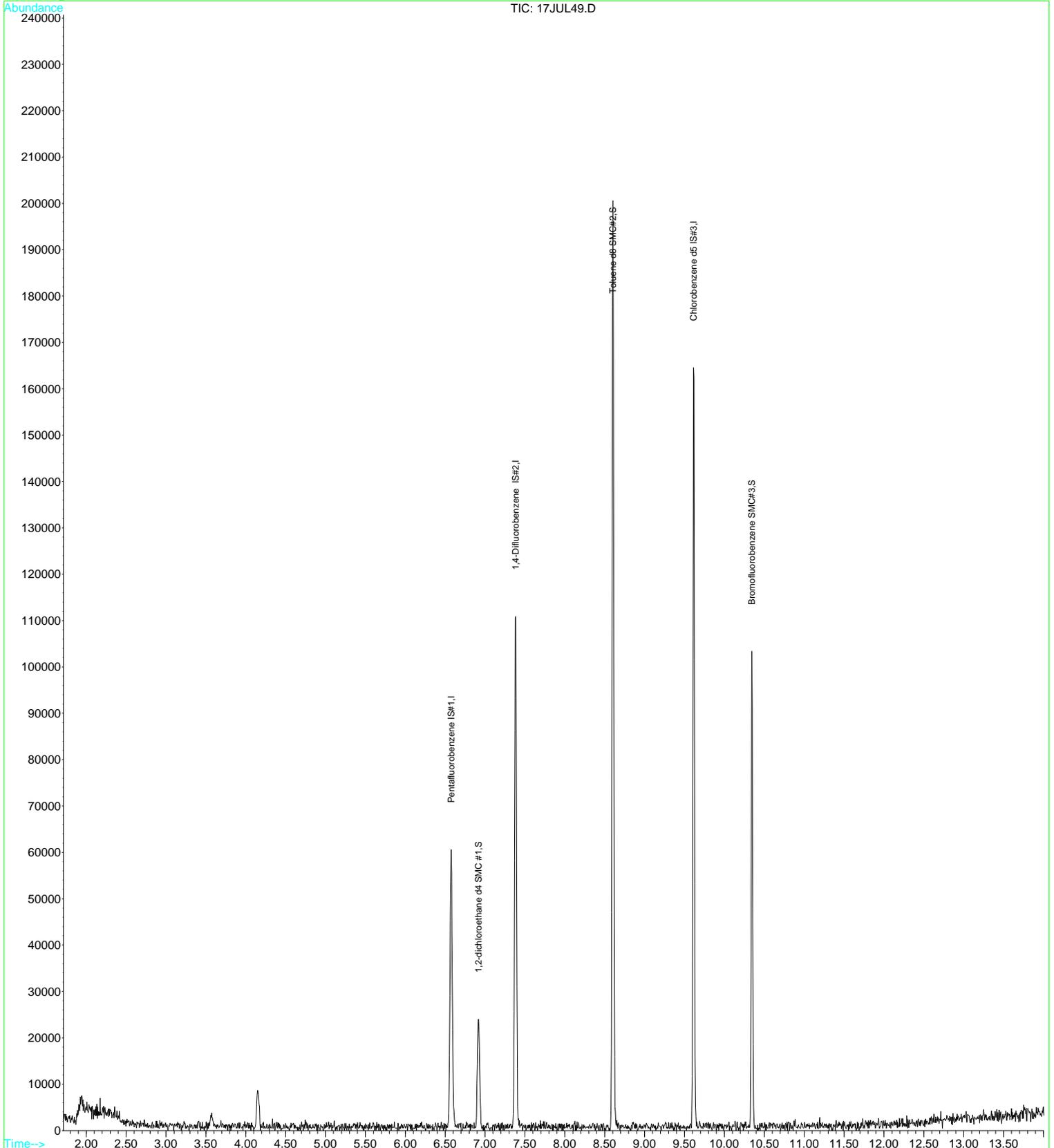
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL49.D
Acq On : 17 Jul 2017 11:37 pm
Sample : 1712538-TUN1
Misc : 1 VO-108-70267;50NG
MS Integration Params: rteint.p
Quant Time: Jul 18 7:07 2017

Vial: 49
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Wed Jul 12 08:31:09 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL62.D Vial: 62
 Acq On : 29 Jul 2017 6:53 am Operator: MGC
 Sample : 1713324-TUN3 Inst : MS-V5
 Misc : 1 VO-108-70267;50NG Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:31 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	31410	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	57014	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	16085	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	12307	13.42	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	134.20%#
31) Toluene d8 SMC#2	8.60	98	68018	9.66	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.60%
49) Bromofluorobenzene SMC#3	10.35	95	21026	8.75	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	87.50%

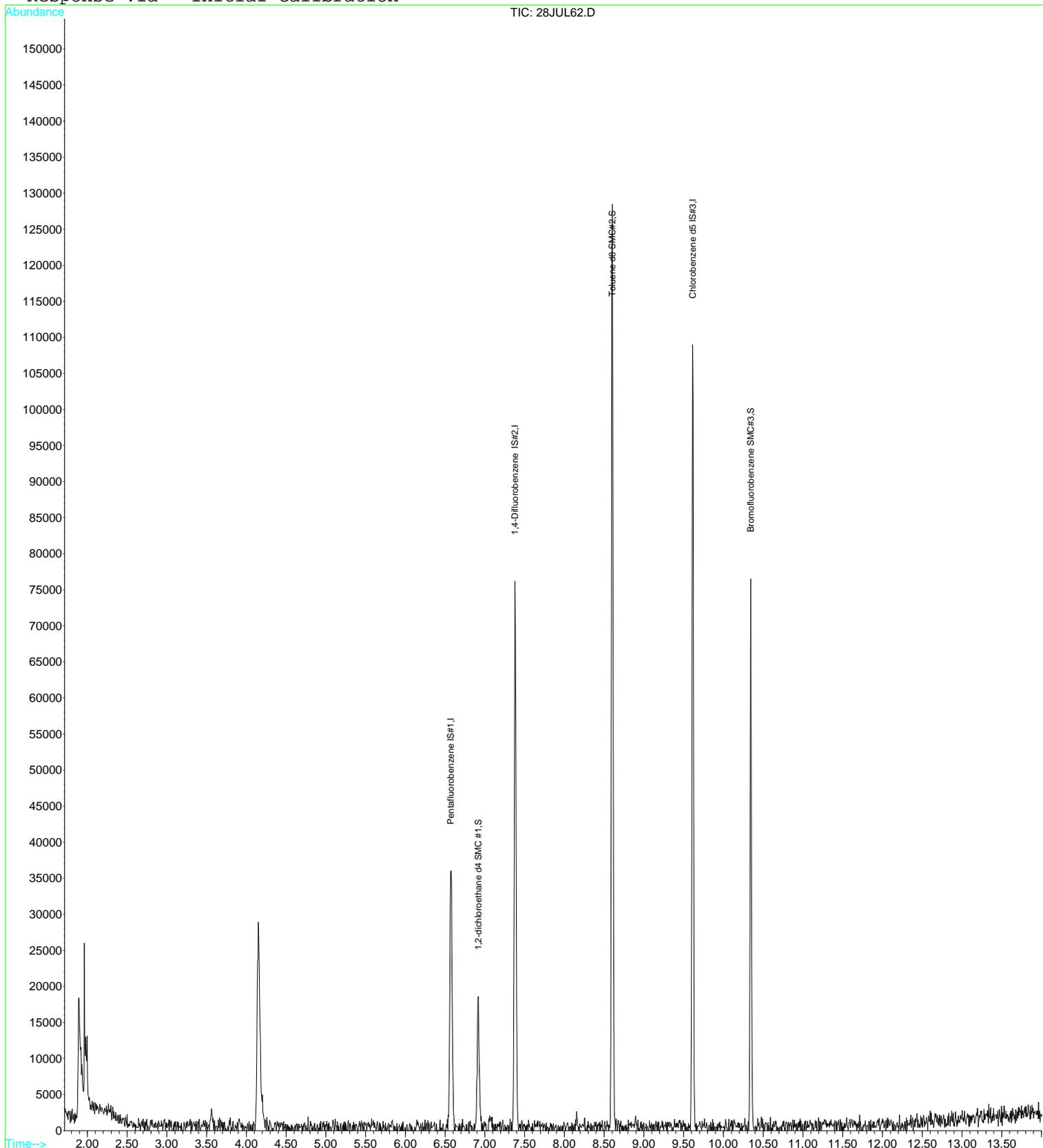
Target Compounds Qvalue

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL62.D
Acq On : 29 Jul 2017 6:53 am
Sample : 1713324-TUN3
Misc : 1 VO-108-70267;50NG
MS Integration Params: rteint.p
Quant Time: Jul 29 9:31 2017

Vial: 62
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL12.D
 Acq On : 29 Jul 2017 6:45 pm
 Sample : 1713390-TUN2
 Misc : 1 VO-108-70267;50NG
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:25 2017

Vial: 12
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	42024	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	70241	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	20433	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	15139	12.33	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	123.30%
31) Toluene d8 SMC#2	8.60	98	85246	9.83	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.30%
49) Bromofluorobenzene SMC#3	10.34	95	26911	8.82	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	88.20%

Target Compounds

Qvalue

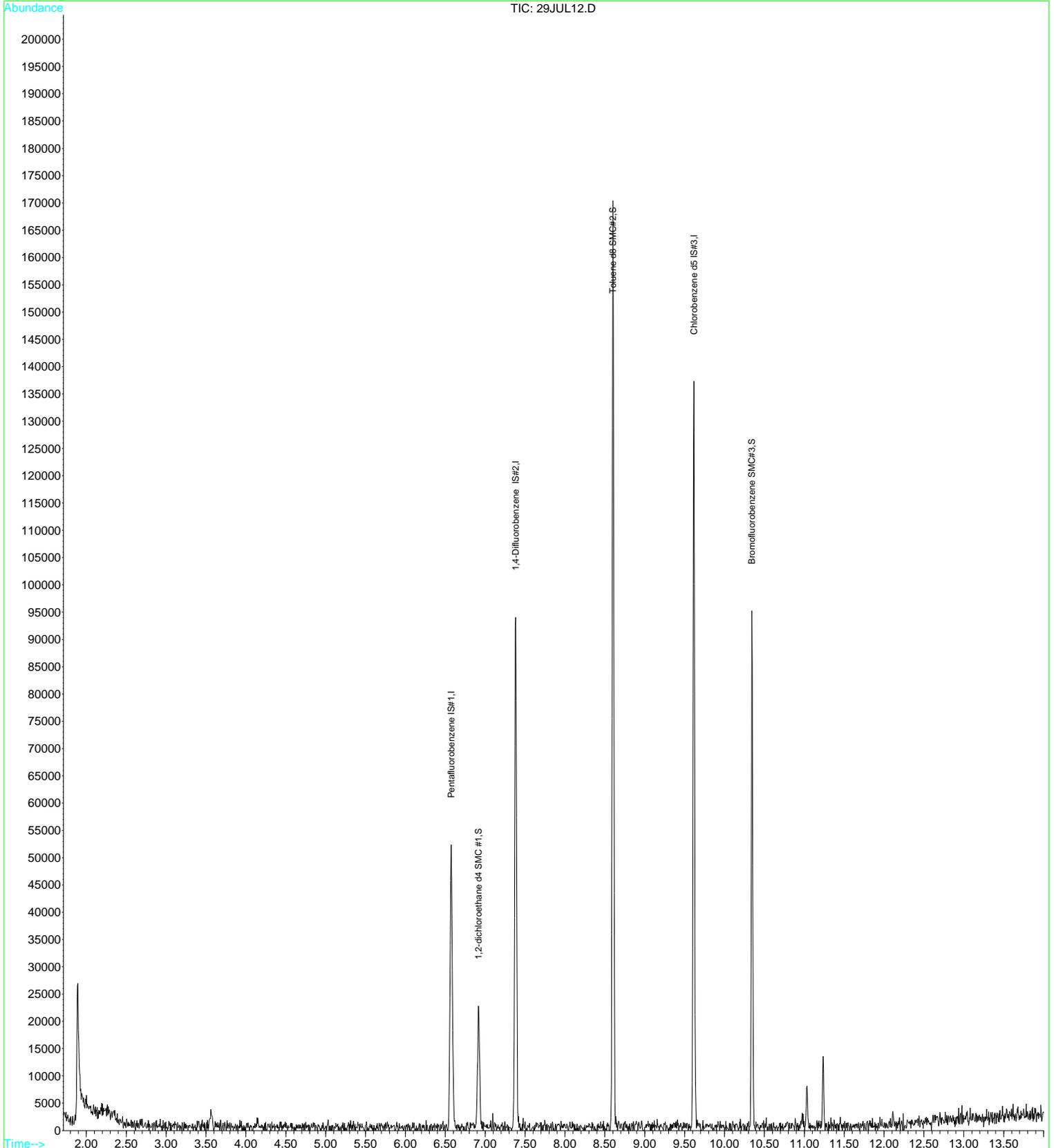
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL12.D
Acq On : 29 Jul 2017 6:45 pm
Sample : 1713390-TUN2
Misc : 1 VO-108-70267;50NG
MS Integration Params: rteint.p
Quant Time: Jul 30 5:25 2017

Vial: 12
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL42.D Vial: 42
 Acq On : 30 Jul 2017 6:14 am Operator: MGC
 Sample : 1713390-TUN3 Inst : MS-V5
 Misc : 1 VO-108-70267;50NG Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 6:54 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	35154	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	61931	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	15511	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	13621	13.27	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	132.70%#
31) Toluene d8 SMC#2	8.61	98	74039	9.68	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.80%
49) Bromofluorobenzene SMC#3	10.34	95	23440	10.12	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.20%

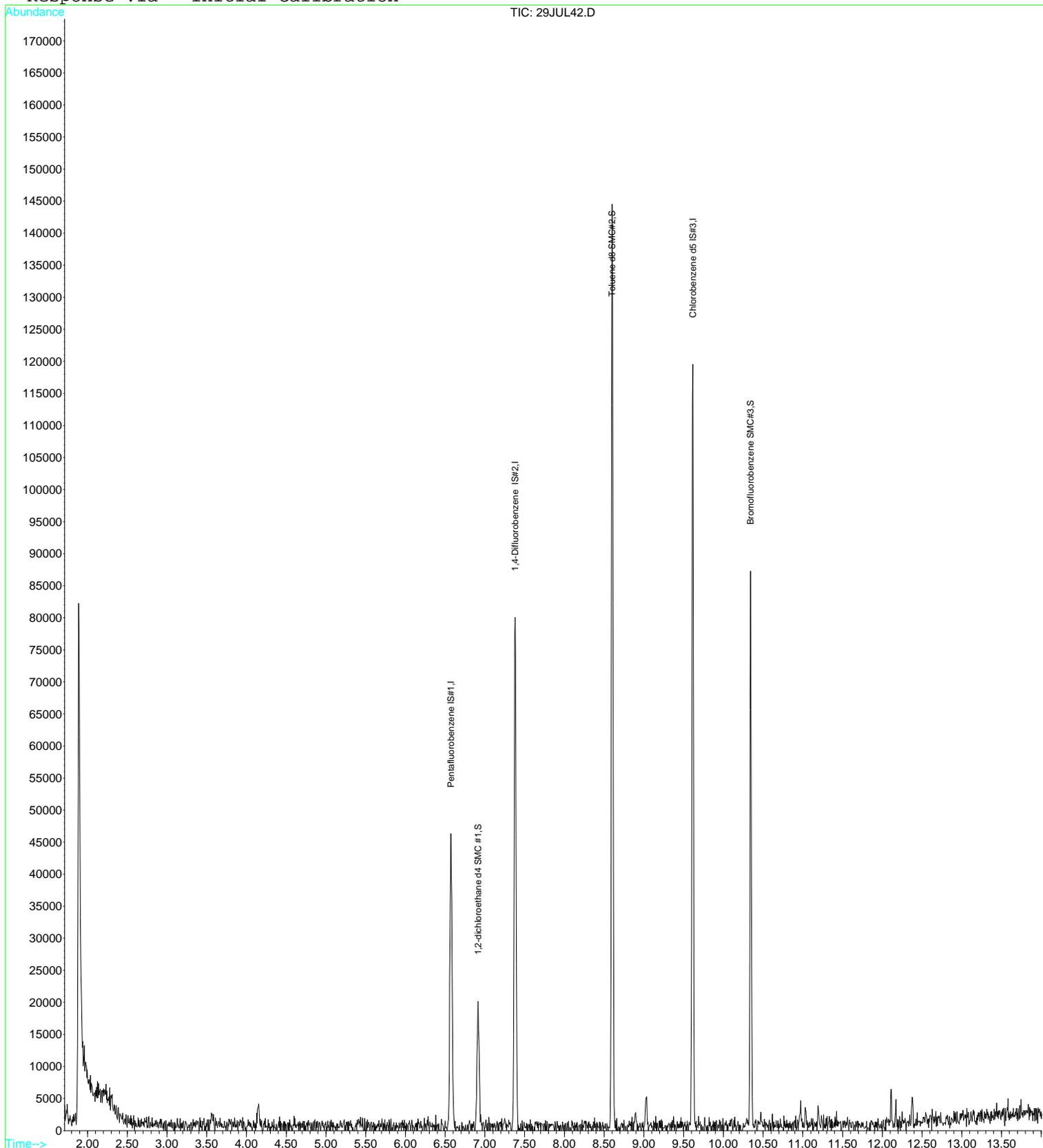
Target Compounds Qvalue

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL42.D
Acq On : 30 Jul 2017 6:14 am
Sample : 1713390-TUN3
Misc : 1 VO-108-70267;50NG
MS Integration Params: rteint.p
Quant Time: Jul 30 6:54 2017

Vial: 42
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL01.D
 Acq On : 30 Jul 2017 7:45 am
 Sample : 1713392-TUN1
 Misc : 1 VO-108-70267;50NG
 MS Integration Params: rteint.p
 Quant Time: Jul 30 8:12 2017

Vial: 1
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	44483	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	70815	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	16615	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	13814	10.63	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	106.30%
31) Toluene d8 SMC#2	8.60	98	81072	9.27	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	92.70%
49) Bromofluorobenzene SMC#3	10.34	95	26210	10.56	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	105.60%

Target Compounds

Qvalue

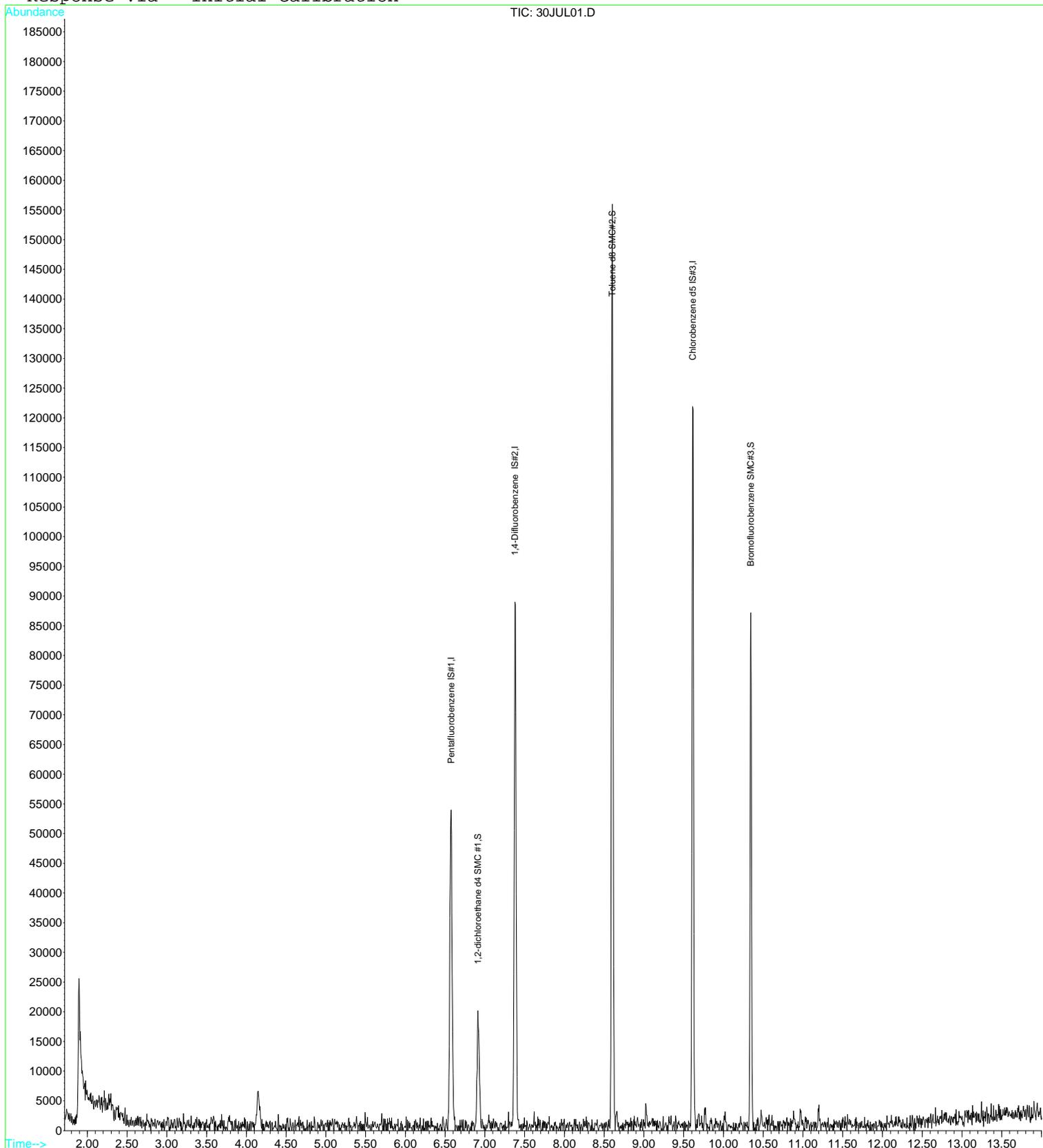
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL01.D
Acq On : 30 Jul 2017 7:45 am
Sample : 1713392-TUN1
Misc : 1 VO-108-70267;50NG
MS Integration Params: rteint.p
Quant Time: Jul 30 8:12 2017

Vial: 1
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL32.D
 Acq On : 30 Jul 2017 7:38 pm
 Sample : 1713392-TUN2
 Misc : 1 VO-108-70267;50NG
 MS Integration Params: rteint.p
 Quant Time: Jul 31 6:05 2017

Vial: 32
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	37223	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	63509	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	16890	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	16289	14.98	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	149.80%#
31) Toluene d8 SMC#2	8.60	98	76970	9.81	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.10%
49) Bromofluorobenzene SMC#3	10.34	95	23352	9.26	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	92.60%

Target Compounds

Qvalue

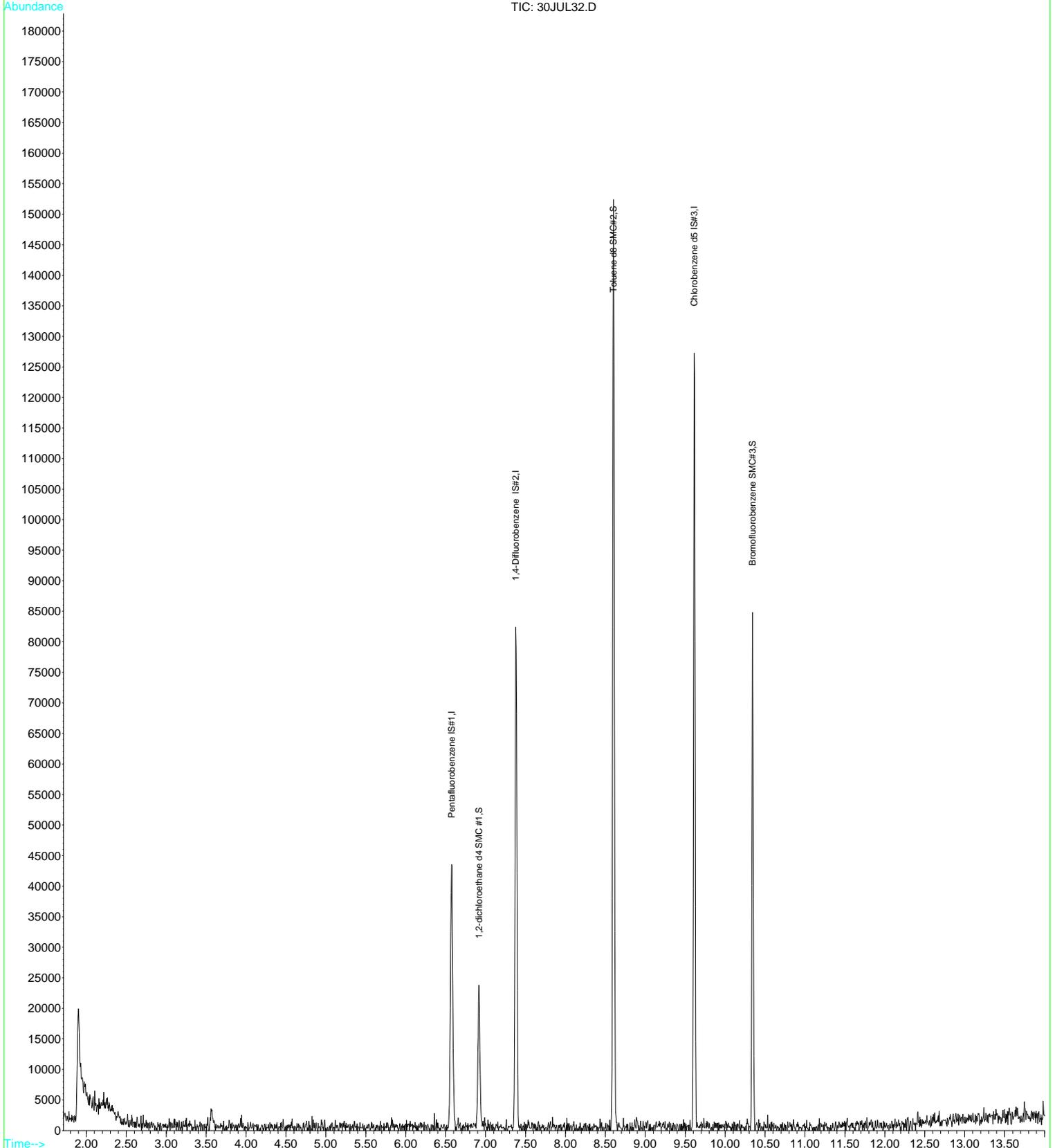
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL30\30JUL32.D
Acq On : 30 Jul 2017 7:38 pm
Sample : 1713392-TUN2
Misc : 1 VO-108-70267;50NG
MS Integration Params: rteint.p
Quant Time: Jul 31 6:05 2017

Vial: 32
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





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Raw Data - Method Blank

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL01.D Vial: 1
 Acq On : 29 Jul 2017 2:32 pm Operator: MGC
 Sample : B[G2492-BLK1 Inst : MS-V5
 Misc : 1 PB1;VRL-15-5710;25ML Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 14:46 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	178938	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	261493	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	69768	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	53270	10.19	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	101.90%
31) Toluene d8 SMC#2	8.60	98	318223	9.85	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.50%
49) Bromofluorobenzene SMC#3	10.35	95	99915	9.59	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	95.90%

Target Compounds

Qvalue

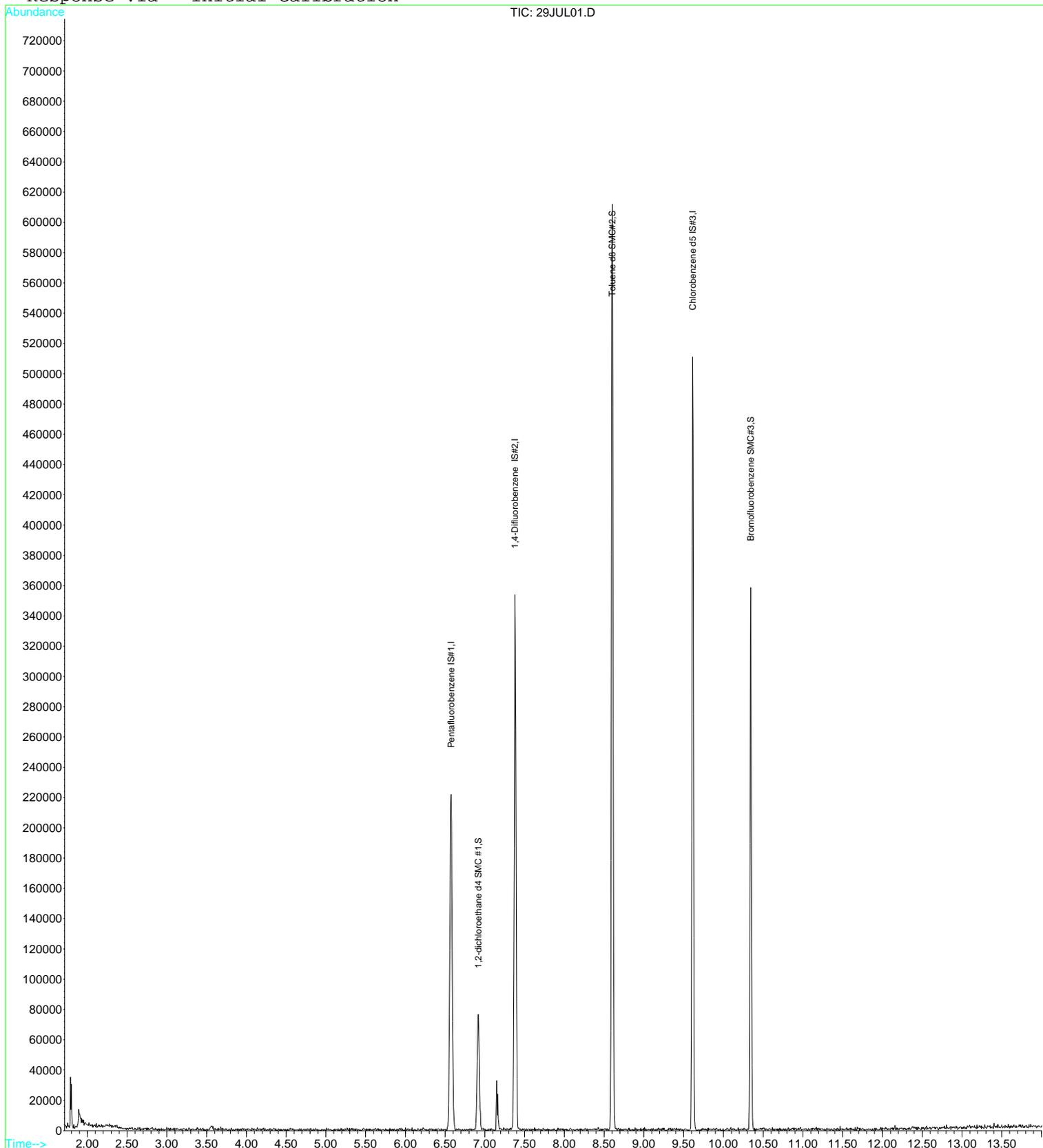
(#) = qualifier out of range (m) = manual integration

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL01.D
Acq On : 29 Jul 2017 2:32 pm
Sample : B[G2492-BLK1
Misc : 1 PB1;VRL-15-5710;25ML
MS Integration Params: rteint.p
Quant Time: Jul 29 14:46 2017

Vial: 1
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL01.D Vial: 1
 Acq On : 29 Jul 2017 2:32 pm Operator: MGC
 Sample : B[G2492-BLK1 Inst : MS-V5
 Misc : 1 PB1;VRL-15-5710;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:08 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	178938	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	261493	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	69768	10.00	ug/L	0.00

Target Compounds Qvalue

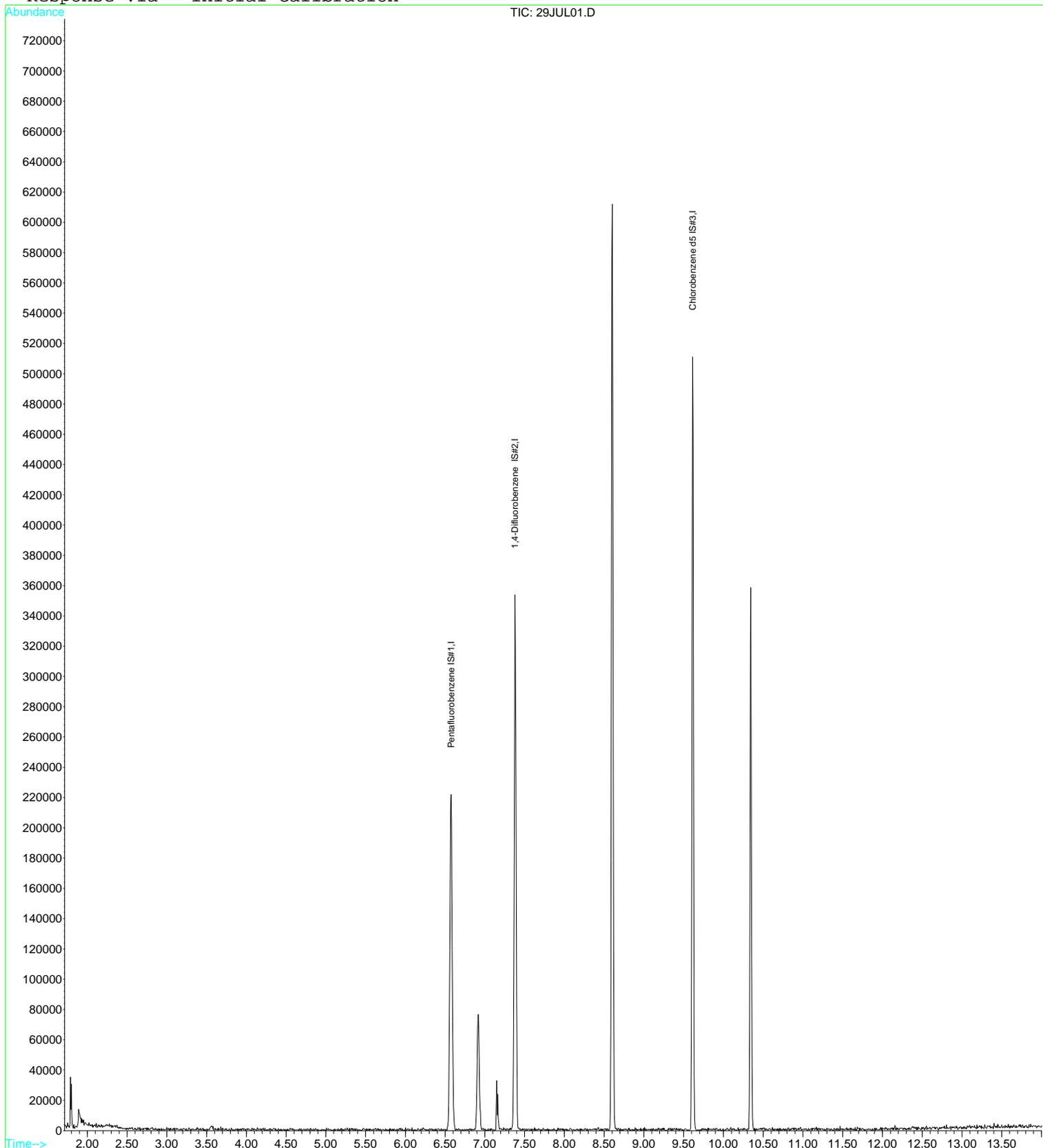
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL01.D
Acq On : 29 Jul 2017 2:32 pm
Sample : B[G2492-BLK1
Misc : 1 PB1;VRL-15-5710;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 5:08 2017

Vial: 1
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





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Raw Data - Matrix Spike

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL04.D Vial: 4
 Acq On : 29 Jul 2017 3:41 pm Operator: MGC
 Sample : B[G2492-MS1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 15:55 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	184494	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	272333	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	72474	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	53510	9.93	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	99.30%
31) Toluene d8 SMC#2	8.60	98	327843	9.75	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.50%
49) Bromofluorobenzene SMC#3	10.34	95	107038	9.89	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.90%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	256305	27.92	ug/L	96
3) Chloromethane	1.94	50	350849	20.22	ug/L	97
4) Vinyl chloride	2.07	62	333341	24.11	ug/L #	67
5) Bromomethane	2.43	94	169986	22.66	ug/L #	87
6) Chloroethane	2.56	64	215672	22.72	ug/L	97
7) Trichlorofluoromethane	2.86	101	300432	26.44	ug/L	99
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	203345	26.07	ug/L #	85
9) 1,1-Dichloroethene	3.51	61	394994	26.53	ug/L	96
10) Methylene chloride	4.15	84	179289	22.52	ug/L	94
11) MTBE	4.49	73	258107	23.17	ug/L #	76
12) T-1,2-dichloroethene	4.50	96	236015	25.54	ug/L	93
13) 1,1-Dichloroethane	5.05	63	471621	23.89	ug/L	100
14) 2,2-Dichloropropane	5.83	77	294467	26.50	ug/L	92
15) Cis-1,2-dichloroethene	5.82	96	286207	29.71	ug/L	95
16) Bromochloromethane	6.17	128	69750	22.72	ug/L #	79
17) Chloroform	6.32	83	334344	23.94	ug/L	92
18) 1,1,1-Trichloroethane	6.53	97	315931	26.13	ug/L #	74
19) 1,1-Dichloropropene	6.72	75	293791	23.26	ug/L	95
20) Carbon tetrachloride	6.72	119	225015	27.14	ug/L	91
22) 1,2-Dichloroethane	7.00	62	176555	23.52	ug/L #	85
23) Benzene	6.94	78	879634	23.28	ug/L #	8
25) Trichloroethene	7.60	130	247505	26.47	ug/L	86
26) 1,2-Dichloropropane	7.83	63	235899	22.83	ug/L	95
27) Dibromomethane	7.90	93	64211	24.62	ug/L	94
28) Bromodichloromethane	8.05	83	196787	25.10	ug/L	91
30) Cis-1,3-dichloropropene	8.40	75	239934	24.51	ug/L	94
32) Toluene	8.65	92	585837	24.83	ug/L	93
33) Trans-1,3-dichloropropene	8.82	75	165181	25.85	ug/L	89
34) 1,1,2-Trichloroethane	8.96	97	97975	23.11	ug/L	85
35) Tetrachloroethene (PCE)	9.03	166	245701	27.42	ug/L	94
36) 1,3-Dichloropropane	9.08	76	155560	22.59	ug/L	94
37) Dibromochloromethane	9.23	129	109515	26.73	ug/L #	95
38) 1,2-Dibromoethane	9.32	107	85645	24.31	ug/L	94
40) Chlorobenzene	9.64	112	572698	23.83	ug/L	89
41) 1,1,1,2-Tetrachloroethane	9.69	131	162975	27.56	ug/L	95
42) Ethylbenzene	9.69	106	358870	25.42	ug/L	81
43) P+m-Xylene	9.77	106	867063	50.20	ug/L	99
44) O-Xylene	10.01	106	399581	25.03	ug/L	91
45) Styrene	10.02	104	625407	25.71	ug/L	93
46) Bromoform	10.15	173	46990	26.41	ug/L #	100
47) Isopropylbenzene	10.23	105	1072388	25.95	ug/L	97
48) 1,1,2,2-Tetrachloroethane	10.41	83	92882	23.57	ug/L	94
50) 1,2,3-Trichloropropane	10.45	110	20795	24.82	ug/L #	17
51) n-propylbenzene	10.48	91	1274883	23.76	ug/L	91
52) bromobenzene	10.44	156	220448	26.05	ug/L	90

(#) = qualifier out of range (m) = manual integration

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL04.D Vial: 4
 Acq On : 29 Jul 2017 3:41 pm Operator: MGC
 Sample : B[G2492-MS1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 15:55 2017 Quant Results File: 82605.RES

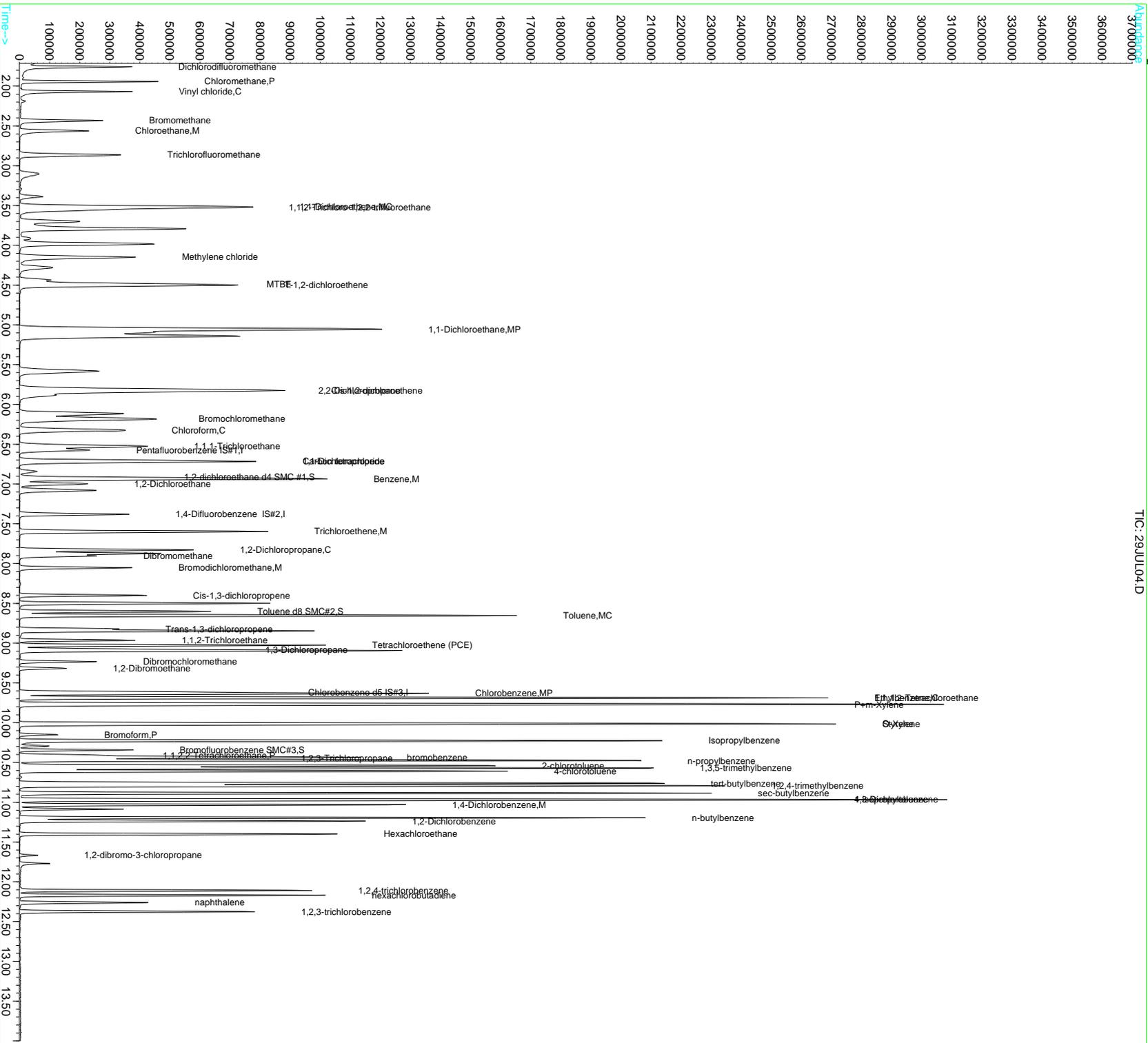
Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) 1,3,5-trimethylbenzene	10.57	105	892289	26.10	ug/L	93
54) 2-chlorotoluene	10.54	91	803642	23.71	ug/L	100
55) 4-chlorotoluene	10.61	91	721265	23.56	ug/L	98
56) tert-butylbenzene	10.76	119	856420	25.35	ug/L	96
57) 1,2,4-trimethylbenzene	10.79	105	837383	24.73	ug/L	94
58) sec-butylbenzene	10.89	105	1201580	26.26	ug/L	99
59) 4-isopropyltoluene	10.97	119	991655	26.57	ug/L	97
60) 1,3-Dichlorobenzene	10.97	146	447691	24.71	ug/L	92
61) 1,4-Dichlorobenzene	11.03	146	433805	24.50	ug/L	93
62) n-butylbenzene	11.19	91	859427	24.71	ug/L	99
63) 1,2-Dichlorobenzene	11.23	146	383500	24.54	ug/L	96
64) Hexachloroethane	11.40	117	141118	22.58	ug/L #	68
65) 1,2-dibromo-3-chloropropan	11.67	75	12274	23.10	ug/L	93
66) 1,2,4-trichlorobenzene	12.11	180	240236	26.54	ug/L	97
67) hexachlorobutadiene	12.17	225	167088	26.66	ug/L #	85
68) naphthalene	12.26	128	271674	23.89	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	203539	26.79	ug/L #	91

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL04.D
Acq On : 29 Jul 2017 3:41 pm
Sample : B1G2492-MS1
Misc : 1 VO-109-70506;70519;70520;70521;25ML
MS Integration Params: rteint.p
Quant Time: Jul 29 15:55 2017

Vial: 4
Operator: MGC
Inst: MS-V5
Multiplr: 1.00
Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL04.D Vial: 4
 Acq On : 29 Jul 2017 3:41 pm Operator: MGC
 Sample : B[G2492-MS1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:11 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	184494	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	272333	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	72474	10.00	ug/L	0.00

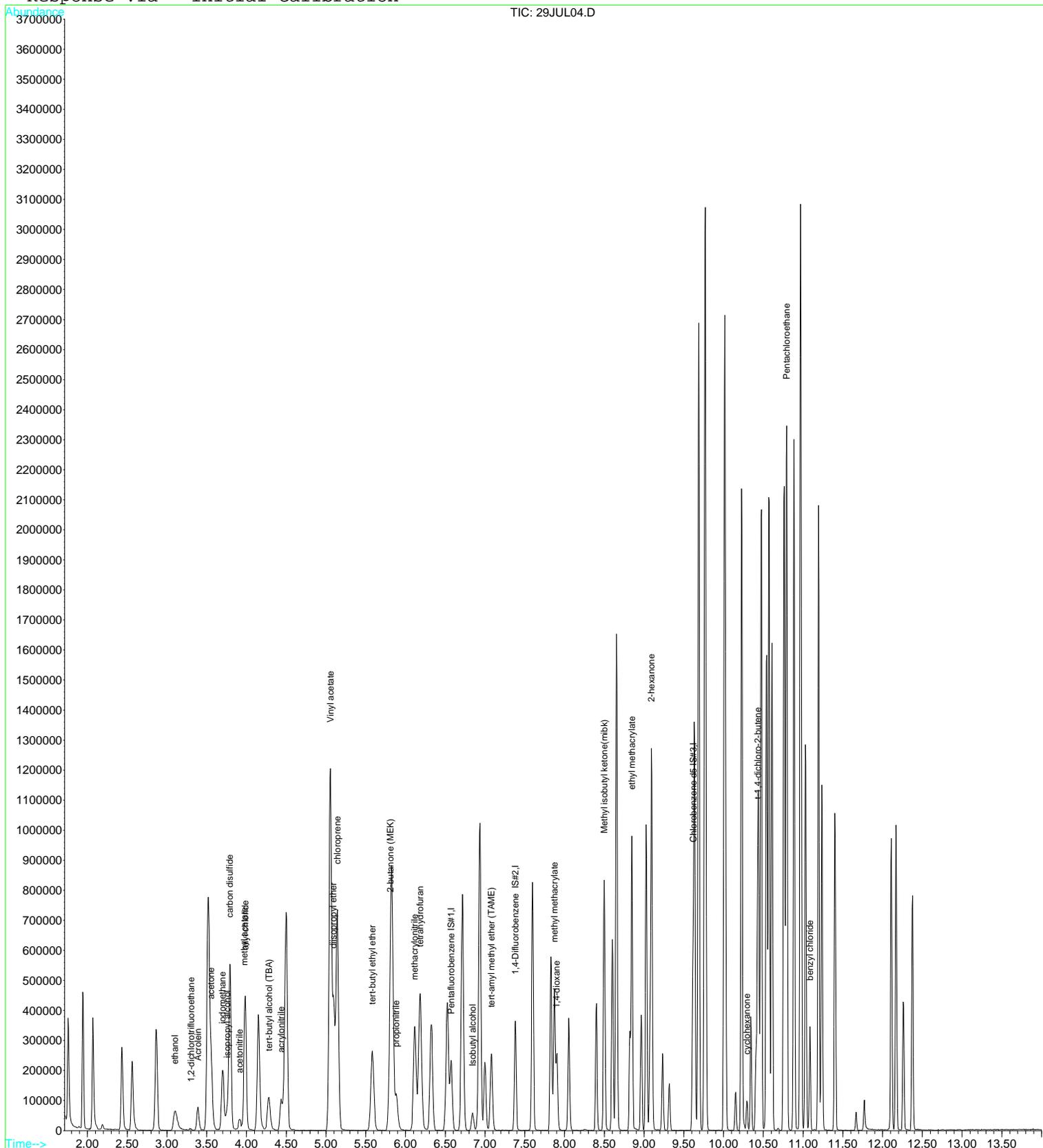
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.10	45	122802	3691.43	ug/L #	73
4) 1,2-dichlorotrifluoroethan	3.30	67	3448	0.28	ug/L #	80
6) isopropyl alcohol	3.75	45	123317	804.19	ug/L #	1
7) Acrolein	3.39	56	84234	250.54	ug/L	94
8) acetone	3.56	43	225202	296.23	ug/L	100
9) tert-butyl alcohol (TBA)	4.28	59	175634	804.64	ug/L	100
10) acetonitrile	3.92	41	55069	152.10	ug/L #	75
11) methyl acetate	3.97	43	4846	2.12	ug/L #	42
12) allyl chloride	3.98	41	569728	30.78	ug/L	98
13) iodomethane	3.70	142	300220	27.60	ug/L	98
14) acrylonitrile	4.44	53	98682	78.73	ug/L	96
15) carbon disulfide	3.80	76	848840	30.35	ug/L	99
17) diisopropyl ether	5.10	87	106497	15.45	ug/L	87
18) Vinyl acetate	5.06	43	1629130	151.29	ug/L	97
19) chloroprene	5.14	53	615422	31.64	ug/L	95
20) tert-butyl ethyl ether	5.58	59	333527	14.78	ug/L	98
21) 2-butanone (MEK)	5.80	43	203590	150.83	ug/L	89
22) propionitrile	5.88	54	169924	374.98	ug/L #	90
23) Isobutyl alcohol	6.84	43	45605	436.20	ug/L #	35
24) methacrylonitrile	6.12	67	182977	148.12	ug/L	96
26) tetrahydrofuran	6.19	42	264506	291.98	ug/L	94
28) tert-amyl methyl ether (TA	7.08	73	178464	14.38	ug/L	88
30) methyl methacrylate	7.87	69	158190	77.80	ug/L	88
32) 1,4-dioxane	7.89	88	50237	2028.95	ug/L	95
33) Methyl isobutyl ketone(mib	8.50	43	492852	161.75	ug/L	100
34) ethyl methacrylate	8.85	69	374524	80.52	ug/L	95
35) 2-hexanone	9.09	43	654049	316.87	ug/L	97
38) cyclohexanone	10.29	55	38906	81.11	ug/L	95
39) t-1,4-dichloro-2-butene	10.43	75	162791	213.35	ug/L #	16
41) Pentachloroethane	10.79	167	66418	22.91	ug/L #	79
42) benzyl chloride	11.09	91	182172	37.00	ug/L	98

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL04.D
Acq On : 29 Jul 2017 3:41 pm
Sample : B[G2492-MS1
Misc : 1 VO-109-70506;70519;70520;70521;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 5:11 2017

Vial: 4
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





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Raw Data - Matrix Spike Duplicate

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL05.D Vial: 5
 Acq On : 29 Jul 2017 4:04 pm Operator: MGC
 Sample : B[G2492-MSD1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 16:18 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	160305	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	245137	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	63881	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	45883	9.80	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	98.00%
31) Toluene d8 SMC#2	8.60	98	293216	9.69	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.90%
49) Bromofluorobenzene SMC#3	10.34	95	94833	9.94	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.40%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	257172	32.24	ug/L	95
3) Chloromethane	1.94	50	381037	25.27	ug/L	97
4) Vinyl chloride	2.07	62	361453	30.09	ug/L #	66
5) Bromomethane	2.44	94	190107	29.17	ug/L #	90
6) Chloroethane	2.56	64	224851	27.26	ug/L	96
7) Trichlorofluoromethane	2.87	101	301052	30.49	ug/L	99
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	208446	30.75	ug/L #	84
9) 1,1-Dichloroethene	3.51	61	399451	30.88	ug/L	96
10) Methylene chloride	4.15	84	188833	27.30	ug/L	97
11) MTBE	4.48	73	265564	27.43	ug/L #	78
12) T-1,2-dichloroethene	4.50	96	247773	30.85	ug/L	91
13) 1,1-Dichloroethane	5.05	63	478025	27.87	ug/L	99
14) 2,2-Dichloropropane	5.83	77	296533	30.72	ug/L	91
15) Cis-1,2-dichloroethene	5.82	96	296639	35.44	ug/L	92
16) Bromochloromethane	6.18	128	74377	27.88	ug/L #	86
17) Chloroform	6.33	83	339692	27.99	ug/L	94
18) 1,1,1-Trichloroethane	6.52	97	321147	30.57	ug/L #	74
19) 1,1-Dichloropropene	6.71	75	301356	27.46	ug/L	95
20) Carbon tetrachloride	6.71	119	228046	31.66	ug/L	93
22) 1,2-Dichloroethane	7.00	62	180373	27.66	ug/L #	87
23) Benzene	6.93	78	911843	27.78	ug/L #	7
25) Trichloroethene	7.60	130	254677	30.25	ug/L	87
26) 1,2-Dichloropropane	7.83	63	248488	26.72	ug/L	95
27) Dibromomethane	7.91	93	65606	27.95	ug/L	93
28) Bromodichloromethane	8.05	83	203014	28.77	ug/L	92
30) Cis-1,3-dichloropropene	8.40	75	250561	28.44	ug/L	96
32) Toluene	8.65	92	610098	28.73	ug/L	92
33) Trans-1,3-dichloropropene	8.82	75	168741	29.34	ug/L #	84
34) 1,1,2-Trichloroethane	8.96	97	100323	26.29	ug/L	85
35) Tetrachloroethene (PCE)	9.03	166	250942	31.11	ug/L	94
36) 1,3-Dichloropropane	9.08	76	162940	26.29	ug/L	92
37) Dibromochloromethane	9.24	129	109717	29.75	ug/L #	92
38) 1,2-Dibromoethane	9.32	107	87885	27.71	ug/L	93
40) Chlorobenzene	9.63	112	583798	27.56	ug/L	88
41) 1,1,1,2-Tetrachloroethane	9.69	131	167180	32.07	ug/L	93
42) Ethylbenzene	9.69	106	367421	29.52	ug/L	82
43) P+m-Xylene	9.77	106	881509	57.90	ug/L	100
44) O-Xylene	10.01	106	410690	29.19	ug/L	91
45) Styrene	10.02	104	641890	29.93	ug/L	93
46) Bromoform	10.15	173	49806	31.76	ug/L #	100
47) Isopropylbenzene	10.23	105	1088130	29.88	ug/L	97
48) 1,1,2,2-Tetrachloroethane	10.41	83	93279	26.85	ug/L	97
50) 1,2,3-Trichloropropane	10.45	110	21181	28.68	ug/L #	19
51) n-propylbenzene	10.48	91	1307758	27.65	ug/L	92
52) bromobenzene	10.44	156	222260	29.79	ug/L	90

(#) = qualifier out of range (m) = manual integration

29JUL05.D 82605.M Sun Jul 30 05:12:27 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL05.D Vial: 5
 Acq On : 29 Jul 2017 4:04 pm Operator: MGC
 Sample : B[G2492-MSD1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 16:18 2017 Quant Results File: 82605.RES

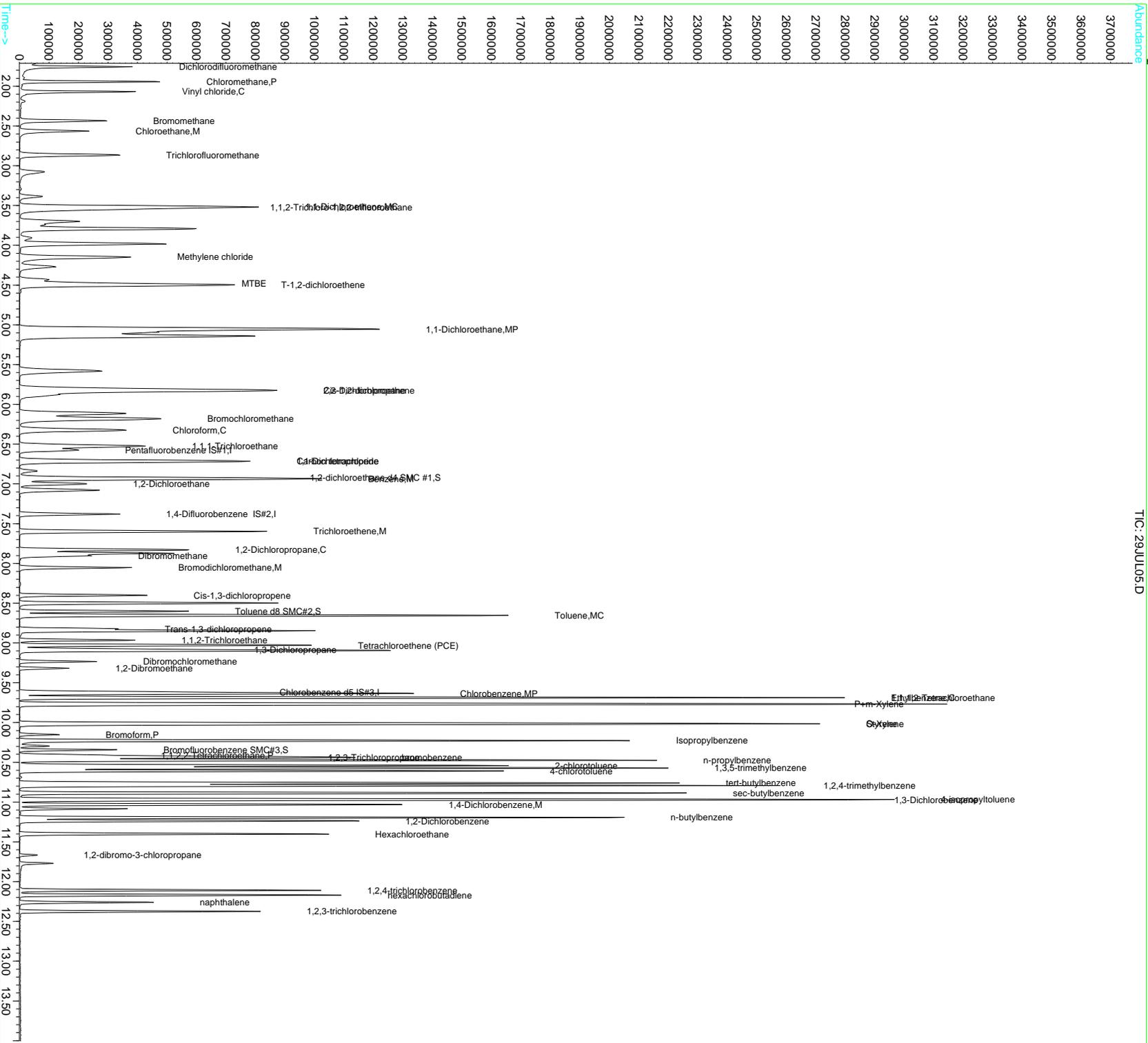
Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) 1,3,5-trimethylbenzene	10.57	105	907022	30.10	ug/L	92
54) 2-chlorotoluene	10.54	91	817602	27.36	ug/L	99
55) 4-chlorotoluene	10.61	91	736120	27.28	ug/L	98
56) tert-butylbenzene	10.76	119	877768	29.48	ug/L	95
57) 1,2,4-trimethylbenzene	10.79	105	862646	28.90	ug/L	94
58) sec-butylbenzene	10.89	105	1236451	30.65	ug/L	99
59) 4-isopropyltoluene	10.97	119	995212	30.25	ug/L	97
60) 1,3-Dichlorobenzene	10.98	146	456841	28.61	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	448466	28.73	ug/L	94
62) n-butylbenzene	11.19	91	902059	29.43	ug/L	99
63) 1,2-Dichlorobenzene	11.24	146	393388	28.56	ug/L	97
64) Hexachloroethane	11.40	117	150144	26.89	ug/L #	67
65) 1,2-dibromo-3-chloropropan	11.67	75	13516	28.86	ug/L	98
66) 1,2,4-trichlorobenzene	12.11	180	255314	32.00	ug/L	98
67) hexachlorobutadiene	12.17	225	175215	31.72	ug/L #	85
68) naphthalene	12.26	128	283043	28.24	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	206800	30.88	ug/L #	89

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL05.D
Acq On : 29 Jul 2017 4:04 pm
Sample : B1G2492-MSD1
Misc : 1 VO-109-70506;70519;70520;70521;25ML
MS Integration Params: rteint.p
Quant Time: Jul 29 16:18 2017

Vial: 5
Operator: MGC
Inst: MS-V5
Multiplr: 1.00
Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL05.D Vial: 5
 Acq On : 29 Jul 2017 4:04 pm Operator: MGC
 Sample : B[G2492-MSD1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:12 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	160305	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	245137	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	63881	10.00	ug/L	0.00

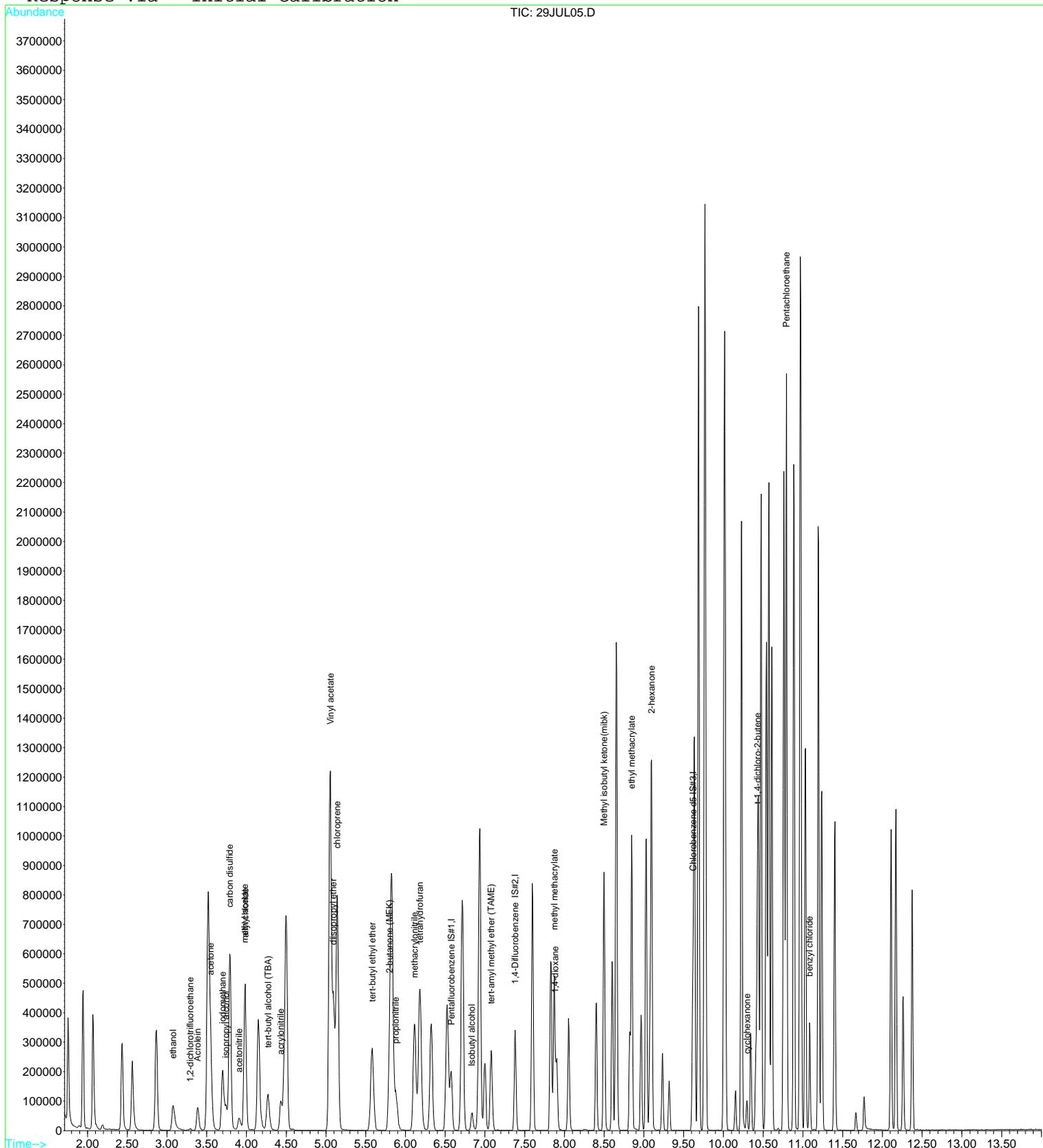
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.08	45	137763	4766.03	ug/L #	75
4) 1,2-dichlorotrifluoroethan	3.29	67	3481	0.33	ug/L	81
6) isopropyl alcohol	3.74	45	128188	962.09	ug/L #	1
7) Acrolein	3.39	56	89563	306.58	ug/L	94
8) acetone	3.55	43	230761	349.35	ug/L	100
9) tert-butyl alcohol (TBA)	4.27	59	181861	958.89	ug/L	100
10) acetonitrile	3.91	41	59055	187.73	ug/L	99
11) methyl acetate	3.97	43	4867	2.45	ug/L #	50
12) allyl chloride	3.98	41	619141	38.50	ug/L	99
13) iodomethane	3.70	142	309508	32.75	ug/L	100
14) acrylonitrile	4.43	53	99629	91.48	ug/L	93
15) carbon disulfide	3.79	76	931966	38.35	ug/L	100
17) diisopropyl ether	5.09	87	112914	18.85	ug/L	83
18) Vinyl acetate	5.05	43	1693390	180.99	ug/L	97
19) chloroprene	5.14	53	663346	39.25	ug/L	93
20) tert-butyl ethyl ether	5.58	59	352515	17.98	ug/L	97
21) 2-butanone (MEK)	5.79	43	205010	174.80	ug/L	92
22) propionitrile	5.88	54	181904	461.99	ug/L #	89
23) Isobutyl alcohol	6.83	43	47709	525.18	ug/L #	42
24) methacrylonitrile	6.11	67	191944	178.82	ug/L	98
26) tetrahydrofuran	6.18	42	272276	345.91	ug/L	91
28) tert-amyl methyl ether (TA)	7.08	73	188034	17.44	ug/L	88
30) methyl methacrylate	7.87	69	168631	92.14	ug/L	92
32) 1,4-dioxane	7.89	88	50166	2250.85	ug/L	97
33) Methyl isobutyl ketone(mib)	8.50	43	505152	184.18	ug/L	99
34) ethyl methacrylate	8.85	69	384975	91.95	ug/L	95
35) 2-hexanone	9.10	43	672324	361.86	ug/L	98
38) cyclohexanone	10.29	55	40809	96.52	ug/L	96
39) t-1,4-dichloro-2-butene	10.42	75	173902	258.57	ug/L #	16
41) Pentachloroethane	10.79	167	76540	29.95	ug/L	84
42) benzyl chloride	11.08	91	197601	44.90	ug/L	98

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL05.D
 Acq On : 29 Jul 2017 4:04 pm
 Sample : B[G2492-MSD1
 Misc : 1 VO-109-70506;70519;70520;70521;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:12 2017

Vial: 5
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration





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Raw Data - Lab Control Sample

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL03.D
 Acq On : 29 Jul 2017 3:18 pm
 Sample : B[G2492-BS1
 Misc : 1 VO-109-70506;70519;70520;70521;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 29 15:32 2017

Vial: 3
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	180069	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	262924	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	71879	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	53502	10.17	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	101.70%
31) Toluene d8 SMC#2	8.60	98	322890	9.95	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.50%
49) Bromofluorobenzene SMC#3	10.34	95	107823	10.05	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.50%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	254982	28.46	ug/L	96
3) Chloromethane	1.95	50	387163	22.86	ug/L	98
4) Vinyl chloride	2.07	62	347136	25.72	ug/L #	66
5) Bromomethane	2.43	94	173498	23.70	ug/L #	87
6) Chloroethane	2.56	64	211222	22.80	ug/L	96
7) Trichlorofluoromethane	2.87	101	298909	26.95	ug/L	96
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	202677	26.62	ug/L #	84
9) 1,1-Dichloroethene	3.51	61	393599	27.09	ug/L	95
10) Methylene chloride	4.15	84	182650	23.51	ug/L	97
11) MTBE	4.48	73	253618	23.32	ug/L #	78
12) T-1,2-dichloroethene	4.50	96	232855	25.81	ug/L	92
13) 1,1-Dichloroethane	5.05	63	460327	23.89	ug/L	100
14) 2,2-Dichloropropane	5.83	77	292418	26.97	ug/L	86
15) Cis-1,2-dichloroethene	5.82	96	226157	24.05	ug/L	94
16) Bromochloromethane	6.18	128	73951	24.68	ug/L #	88
17) Chloroform	6.33	83	336037	24.65	ug/L	95
18) 1,1,1-Trichloroethane	6.53	97	315670	26.75	ug/L #	73
19) 1,1-Dichloropropene	6.72	75	295432	23.97	ug/L	94
20) Carbon tetrachloride	6.71	119	225642	27.89	ug/L	93
22) 1,2-Dichloroethane	7.00	62	178553	24.38	ug/L #	85
23) Benzene	6.94	78	864595	23.45	ug/L #	8
25) Trichloroethene	7.60	130	242434	26.85	ug/L	87
26) 1,2-Dichloropropane	7.83	63	235565	23.61	ug/L	96
27) Dibromomethane	7.90	93	63145	25.08	ug/L	93
28) Bromodichloromethane	8.05	83	201739	26.65	ug/L	95
29) 2-ceve	8.27	63	235127	91.26	ug/L #	78
30) Cis-1,3-dichloropropene	8.40	75	242443	25.65	ug/L	95
32) Toluene	8.65	92	599342	26.31	ug/L	91
33) Trans-1,3-dichloropropene	8.82	75	167224	27.11	ug/L #	85
34) 1,1,2-Trichloroethane	8.97	97	97823	23.90	ug/L	84
35) Tetrachloroethene (PCE)	9.03	166	260919	30.16	ug/L	94
36) 1,3-Dichloropropane	9.08	76	155690	23.42	ug/L	93
37) Dibromochloromethane	9.23	129	106962	27.04	ug/L #	95
38) 1,2-Dibromoethane	9.32	107	85127	25.03	ug/L	97
40) Chlorobenzene	9.63	112	549744	23.06	ug/L	89
41) 1,1,1,2-Tetrachloroethane	9.69	131	160812	27.42	ug/L	98
42) Ethylbenzene	9.69	106	361482	25.81	ug/L	80
43) P+m-Xylene	9.77	106	857680	50.07	ug/L	98
44) O-Xylene	10.01	106	406545	25.68	ug/L	89
45) Styrene	10.02	104	628895	26.06	ug/L	93
46) Bromoform	10.15	173	47107	26.70	ug/L #	100
47) Isopropylbenzene	10.23	105	1083643	26.44	ug/L	97
48) 1,1,2,2-Tetrachloroethane	10.41	83	91614	23.44	ug/L	91
50) 1,2,3-Trichloropropene	10.45	110	20257	24.38	ug/L #	16
51) n-propylbenzene	10.47	91	1302265	24.47	ug/L	92

(#) = qualifier out of range (m) = manual integration
 29JUL03.D 82605.M Sun Jul 30 05:10:15 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL03.D Vial: 3
 Acq On : 29 Jul 2017 3:18 pm Operator: MGC
 Sample : B[G2492-BS1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 15:32 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

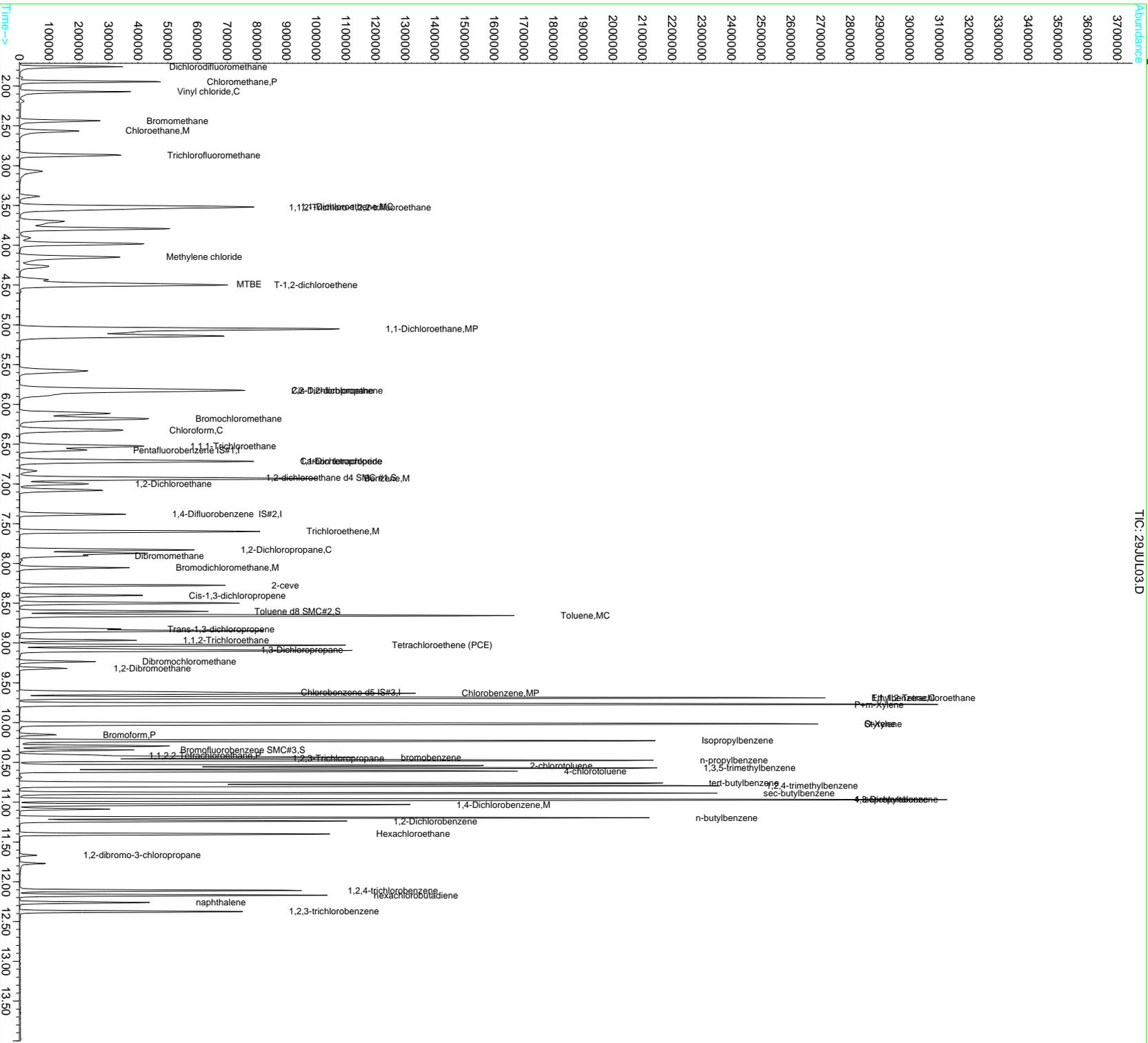
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	218707	26.05	ug/L	89
53) 1,3,5-trimethylbenzene	10.57	105	905296	26.70	ug/L	93
54) 2-chlorotoluene	10.54	91	808387	24.05	ug/L	100
55) 4-chlorotoluene	10.61	91	734031	24.18	ug/L	97
56) tert-butylbenzene	10.76	119	874403	26.10	ug/L	98
57) 1,2,4-trimethylbenzene	10.79	105	846750	25.21	ug/L	94
58) sec-butylbenzene	10.89	105	1228835	27.07	ug/L	99
59) 4-isopropyltoluene	10.96	119	996505	26.92	ug/L	96
60) 1,3-Dichlorobenzene	10.97	146	443106	24.66	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	428977	24.43	ug/L	95
62) n-butylbenzene	11.19	91	884075	25.63	ug/L	99
63) 1,2-Dichlorobenzene	11.24	146	370494	23.90	ug/L	95
64) Hexachloroethane	11.40	117	143356	23.09	ug/L #	69
65) 1,2-dibromo-3-chloropropan	11.67	75	11980	22.74	ug/L	92
66) 1,2,4-trichlorobenzene	12.11	180	246561	27.46	ug/L	100
67) hexachlorobutadiene	12.17	225	173050	27.84	ug/L #	86
68) naphthalene	12.26	128	261081	23.15	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	198913	26.40	ug/L #	91

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL03.D
 Acq On : 29 Jul 2017 3:18 pm
 Sample : B1G2492-BS1
 Misc : 1 VO-109-70506;70519;70520;70521;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 29 15:32 2017

Vial: 3
 Operator: MGC
 Inst: MS-V5
 Multiplr: 1.00

Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL03.D Vial: 3
 Acq On : 29 Jul 2017 3:18 pm Operator: MGC
 Sample : B[G2492-BS1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:10 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	180069	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	262924	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	71879	10.00	ug/L	0.00

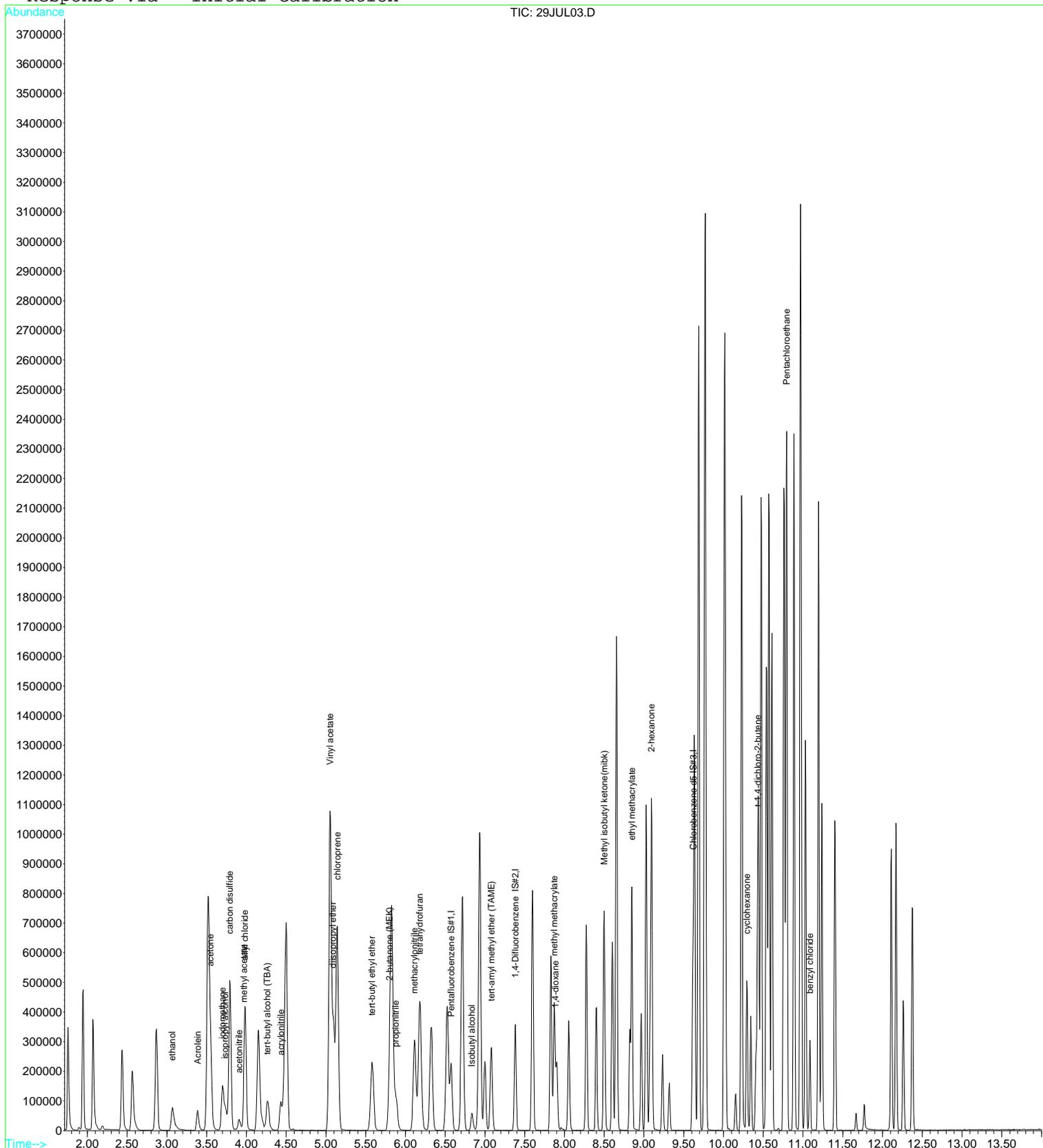
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.07	45	125995	3880.48	ug/L #	78
6) isopropyl alcohol	3.73	45	117971	788.23	ug/L #	71
7) Acrolein	3.39	56	70475	214.77	ug/L	86
8) acetone	3.55	43	204975	276.25	ug/L	99
9) tert-butyl alcohol (TBA)	4.26	59	148628	697.65	ug/L	100
10) acetonitrile	3.91	41	49429	139.88	ug/L	97
11) methyl acetate	3.97	43	5179	2.32	ug/L #	32
12) allyl chloride	3.98	41	521631	28.88	ug/L	100
13) iodomethane	3.70	142	218568	20.59	ug/L	96
14) acrylonitrile	4.43	53	96576	78.94	ug/L	97
15) carbon disulfide	3.79	76	780352	28.58	ug/L	99
17) diisopropyl ether	5.09	87	89999	13.37	ug/L	94
18) Vinyl acetate	5.05	43	1413052	134.45	ug/L	98
19) chloroprene	5.14	53	584858	30.81	ug/L	97
20) tert-butyl ethyl ether	5.58	59	290121	13.18	ug/L	97
21) 2-butanone (MEK)	5.79	43	182076	138.21	ug/L	87
22) propionitrile	5.88	54	168482	380.94	ug/L #	89
23) Isobutyl alcohol	6.84	43	44911	440.12	ug/L #	40
24) methacrylonitrile	6.12	67	158060	131.09	ug/L	94
26) tetrahydrofuran	6.18	42	238089	269.27	ug/L	95
28) tert-amyl methyl ether (TA)	7.08	73	155235	12.81	ug/L	93
30) methyl methacrylate	7.87	69	134332	68.43	ug/L	85
32) 1,4-dioxane	7.89	88	44830	1875.36	ug/L	99
33) Methyl isobutyl ketone(mib)	8.50	43	428986	145.83	ug/L	100
34) ethyl methacrylate	8.85	69	317887	70.79	ug/L	95
35) 2-hexanone	9.09	43	589599	295.87	ug/L	98
38) cyclohexanone	10.29	55	197767	415.72	ug/L	99
39) t-1,4-dichloro-2-butene	10.43	75	156821	207.22	ug/L #	14
41) Pentachloroethane	10.79	167	52620	18.30	ug/L #	74
42) benzyl chloride	11.09	91	164177	33.86	ug/L	97

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL03.D
Acq On : 29 Jul 2017 3:18 pm
Sample : B[G2492-BS1
Misc : 1 VO-109-70506;70519;70520;70521;25ML
MS Integration Params: rteint.p
Quant Time: Jul 30 5:10 2017

Vial: 3
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2492

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Volatiles - GC/MS - EPA 5030 Water MS

SurrogateUsed: 7G20041

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720282-19 A	g524.2w Full5	7/28/2017 7:00AM	MGC	25	25				1	
1720372-01 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-01 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-02 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-03 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-04 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-05 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-06 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-10 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-13 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-14 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-15 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-15RE1 B	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-16 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-16 A	g524.2w Full5	7/29/2017 7:00AM		25	25				4	
1720405-17 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-18 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-19 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-20 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-21 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
1720405-22 A	gm8260w Full QC Navy	7/29/2017 7:00AM	MGC	25	25				4	
B[G2492-BLK1	QC	7/29/2017 7:00AM	MGC	25	25				4	
B[G2492-BS1	QC	7/29/2017 7:00AM	MGC	25	25	7G21007		12.5	4	
B[G2492-MS1	QC	7/29/2017 7:00AM	MGC	25	25	7G21007	1720405-16	12.5	4	
B[G2492-MSD1	QC	7/29/2017 7:00AM	MGC	25	25	7G21007	1720405-16	12.5	4	



PREPARATION BENCH SHEET

B|G2492

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Volatiles - GC/MS - EPA 5030 Water MS

SurrogateUsed: 7G20041

Surrogate Mixes	Description	Solvent	Prepared	Expires
7G20041	8260 V5 WORK SURR. STD BATCH	Methanol VRL-15-5590	7/20/2017 by Miguel Chavez	10/20/2017
7G21007	8260 V5 I SPIKE COMBO	meoh	7/20/2017 by Miguel Chavez	10/20/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1712752

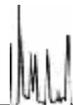
Instrument: MS-V5

Calibration ID: 1707017

Sequence Date: 07/18/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1712752-TUN1	QC		1		7F24002		
1712752-CAL1	QC		2		7G20044		
1712752-CAL2	QC		3		7G20045		
1712752-CAL3	QC		4		7G20046		
1712752-CAL4	QC		5		7G20047		
1712752-CAL5	QC		6		7G20048		
1712752-CAL6	QC		7		7G20049		
1712752-CAL7	QC		8		7G20056		
1712752-CAL8	QC		9		7G20057		
1712752-CAL9	QC		10		7G20058		
1712752-CALA	QC		11		7G20059		
1712752-CALB	QC		12		7G20060		
1712752-CALC	QC		13		7G20061		
1712752-TUN2	QC		14		7F24002		
1712752-CALD	QC		15		7G20063		
1712752-CALE	QC		16		7G20064		
1712752-CALF	QC		17		7G20065		
1712752-CALG	QC		18		7G20066		
1712752-CALH	QC		19		7G20067		
1712752-CALI	QC		20		7G20068		



ANALYSIS SEQUENCE

1713390

Instrument: MS-V5

Calibration ID: 1707017

Sequence Date: 07/29/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713390-ICV1	QC		1		7G20050		
1713390-ICB1	QC		2		7G21006		
1713390-ICV2	QC		3		7G20062		
1713390-ICB2	QC		4		7G21006		
1713390-TUN1	QC		5		7F24002		
1713390-CCV1	QC		6		7G21004		
1713390-CCV2	QC		7		7G21005		
1713390-CCB1	QC		8		7G21006		
B[G2492-BLK1	QC		9			7G20040	
1720405-16	gm8260w Full QC Navy	A	10			7G20040	Full SAP LIST
B[G2492-BS1	QC		11			7G20040	
B[G2492-MS1	QC		12			7G20040	
B[G2492-MSD1	QC		13			7G20040	
1720405-15	gm8260w Full QC Navy	A	14			7G20040	Full SAP LIST
1713390-TUN2	QC		15		7F24002		
1713390-CCV3	QC		16		7G21004		
1713390-CCV4	QC		17		7G21005		
1713390-CCB2	QC		18		7G21006		
1720405-02	gm8260w Full QC Navy	A	19			7G20040	Full SAP LIST
1720405-03	gm8260w Full QC Navy	A	20			7G20040	Full SAP LIST
1720405-04	gm8260w Full QC Navy	A	21			7G20040	Full SAP LIST
1720405-01	gm8260w Full QC Navy	A	22			7G20040	Full SAP LIST
1720405-05	gm8260w Full QC Navy	A	23			7G20040	Full SAP LIST
1720405-06	gm8260w Full QC Navy	A	24			7G20040	Full SAP LIST
1720405-10	gm8260w Full QC Navy	A	25			7G20040	Full SAP LIST
1720405-13	gm8260w Full QC Navy	A	26			7G20040	Full SAP LIST
1720405-14	gm8260w Full QC Navy	A	27			7G20040	Full SAP LIST
1720405-17	gm8260w Full QC Navy	A	28			7G20040	Full SAP LIST
1720405-18	gm8260w Full QC Navy	A	29			7G20040	Full SAP LIST
1720405-19	gm8260w Full QC Navy	A	30			7G20040	Full SAP LIST
1720405-20	gm8260w Full QC Navy	A	31			7G20040	Full SAP LIST
1720405-21	gm8260w Full QC Navy	A	32			7G20040	Full SAP LIST
1720405-22	gm8260w Full QC Navy	A	33			7G20040	Full SAP LIST
1720372-01	gm8260w Full QC Navy	A	34			7G20040	
B[G2494-BLK1	QC		35			7G20040	
1720313-05	g8260w Full	M	36			7G20040	BatchQC
1720313-05	g8260w Full2	M	37			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-05	g8260w TICs	M	38			7G20040	BatchQC



ANALYSIS SEQUENCE

1713390

Instrument: MS-V5

Calibration ID: 1707017

Sequence Date: 07/29/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720313-02	g8260w Full2	A	39			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-01	g8260w Full2	A	40			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-03	g8260w Full2	A	41			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-04	g8260w Full2	A	42			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
B[G2494-BS1	QC		43			7G20040	
B[G2494-MS1	QC		44			7G20040	
B[G2494-MSD1	QC		45			7G20040	
1713390-TUN3	QC		46			7F24002	
1713390-CCV5	QC		47			7G21004	
1713390-CCV6	QC		48			7G21005	
1713390-CCB3	QC		49			7G21006	



ANALYSIS SEQUENCE

1713392

Instrument: MS-V5
Calibration ID: 1707017

Sequence Date: 07/30/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713392-ICV1	QC		1		7G20050		
1713392-ICB1	QC		2		7G21006		
1713392-ICV2	QC		3		7G20062		
1713392-ICB2	QC		4		7G21006		
1713392-TUN1	QC		5		7F24002		
1713392-CCV1	QC		6		7G21004		
1713392-CCV2	QC		7		7G21005		
1713392-CCV3	QC		8		7G21008		
1713392-CCB1	QC		9		7G21006		
1720313-10	g8260w Full2	A	10			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
B[G2502-BLK1	QC		11			7G20040	
1720525-01	g8260w	A	12			7G20040	BatchQC
1720525-01	g8260w Full	A	13			7G20040	Appendix I + 1,4 Dioxane
1720525-01	g8260w TICs	A	14			7G20040	
1720313-06	g8260w Full2	E	15			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-07	g8260w Full2	E	16			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-08	g8260w Full2	E	17			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-09	g8260w Full2	E	18			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
B[G2502-BS1	QC		19			7G20040	
B[G2502-MS1	QC		20			7G20040	
B[G2502-MSD1	QC		21			7G20040	
1720525-02	g8260w Full	A	22			7G20040	Appendix I + 1,4 Dioxane
1720525-02	g8260w TICs	A	23			7G20040	
1720525-03	g8260w Full	A	24			7G20040	Appendix I + 1,4 Dioxane
1720525-03	g8260w TICs	A	25			7G20040	
1720525-04	g8260w Full	A	26			7G20040	Appendix I + 1,4 Dioxane
1720525-04	g8260w TICs	A	27			7G20040	
1720525-05	g8260w Full	A	28			7G20040	Appendix I + 1,4 Dioxane
1720525-05	g8260w TICs	A	29			7G20040	
1720525-06	g8260w Full	A	30			7G20040	Appendix I + 1,4 Dioxane
1720525-06	g8260w TICs	A	31			7G20040	
1720525-07	g8260w Full	A	32			7G20040	Appendix I + 1,4 Dioxane
1720525-07	g8260w TICs	A	33			7G20040	
1720525-08	g8260w Full	A	34			7G20040	Appendix I + 1,4 Dioxane
1720525-08	g8260w TICs	A	35			7G20040	
1720525-09	g8260w Full	A	36			7G20040	Appendix I + 1,4 Dioxane



ANALYSIS SEQUENCE

1713392

Instrument: MS-V5

Calibration ID: 1707017

Sequence Date: 07/30/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720525-09	g8260w TICs	A	37			7G20040	
1720525-10	g8260w Full	A	38			7G20040	Appendix I + 1,4 Dioxane
1720525-10	g8260w TICs	A	39			7G20040	
1720405-15RE1	gm8260w Full QC Navy	B	40			7G20040	Full SAP LIST
1720313-01RE1	g8260w Full2	B	41			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-03RE1	g8260w Full2	B	42			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-05RE1	g8260w Full2	Q	43			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1713392-TUN2	QC		44		7F24002		
1713392-CCV4	QC		45		7G21004		
1713392-CCV5	QC		46		7G21005		
1713392-CCV6	QC		47		7G21008		
1713392-CCB2	QC		48		7G21006		
1720107-01	g8260w Full	A	49			7G20040	
1720107-01	g8260w TICs	A	50			7G20040	
1720107-02	g8260w Full	A	51			7G20040	
1720107-02	g8260w TICs	A	52			7G20040	
1720107-03	g8260w Full	A	53			7G20040	
1720107-03	g8260w TICs	A	54			7G20040	
1720107-04	g8260w Full	A	55			7G20040	
1720107-04	g8260w TICs	A	56			7G20040	
1720107-05	g8260w Full	A	57			7G20040	
1720107-05	g8260w TICs	A	58			7G20040	
1720210-01	g8260w Full	A	59			7G20040	qtrly Exhibit D
1720210-01	g8260w TICs	A	60			7G20040	
1720210-02	g8260w Full	A	61			7G20040	qtrly Exhibit D
1720210-02	g8260w TICs	A	62			7G20040	
1720210-03	g8260w Full	A	63			7G20040	qtrly Exhibit D
1720210-03	g8260w TICs	A	64			7G20040	
1720505-06	g8260w	A	65			7G20040	
1720505-01	g8260w	A	66			7G20040	
1720505-02	g8260w	A	67			7G20040	
1720505-03	g8260w	A	68			7G20040	
1720505-04	g8260w	A	69			7G20040	
1720505-05	g8260w	A	70			7G20040	
1720235-04	g8260w	A	71			7G20040	
1720235-02	g8260w	A	72			7G20040	
1720235-01	g8260w	A	73			7G20040	



ANALYSIS SEQUENCE

1713392

Instrument: MS-V5
Calibration ID: 1707017

Sequence Date: 07/30/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720235-03	g8260w	A	74			7G20040	
1720313-06RE1	g8260w Full2	F	75			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-07RE1	g8260w Full2	F	76			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-08RE1	g8260w Full2	F	77			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1720313-09RE1	g8260w Full2	F	78			7G20040	PCE,TCE,cis-1,2 DCE,trans 1,2 DCE, Vinyl Chloride
1713392-TUN3	QC		79		7F24002		
1713392-CCV7	QC		80		7G21004		
1713392-CCV8	QC		81		7G21005		
1713392-CCV9	QC		82		7G21008		
1713392-CCB3	QC		83		7G21006		



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20405
Class: VOA
Method: EPA-TO-15



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE
EPA-TO-15

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Client Sample Id:

MG1-04-D-R_170725

Lab Sample Id:

1720405-12

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: Sara Guron

Date: 08-25-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS
EPA-TO-15

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Air

Instrument: MS-A1

Analyte	DL	LOD	LOQ	Units
Benzene	0.16	1.0	2.0	ug/m3
Chloroform	0.25	1.0	5.0	ug/m3
Ethylbenzene	0.36	1.0	5.0	ug/m3
Tetrachloroethene	0.34	1.0	5.0	ug/m3
Toluene	0.19	1.0	2.0	ug/m3
Trichloroethene	0.38	1.0	5.0	ug/m3
Trichlorofluoromethane	0.30	1.0	5.0	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.39	1.0	5.0	ug/m3
Vinyl chloride	0.29	1.0	2.0	ug/m3
p- & m-Xylenes	0.83	1.0	5.0	ug/m3
o-Xylene	0.53	1.0	5.0	ug/m3
Total Xylenes	1.4	5.0	10	ug/m3



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-TO-15

MG1-04-D-R_170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Air Laboratory ID: 1720405-12 File ID: 05AUG16.D
Sampled: 07/25/17 09:55 Prepared: 08/05/17 07:53 Analyzed: 08/05/17 15:40
Solids: Preparation: EPA TO-15 Initial/Final: 1 ml / 1 ml
Batch: B[H0513 Sequence: 1713858 Calibration: 1707005 Instrument: MS-A1

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m3)	DL	LOD	LOQ	Q
75-01-4	Vinyl chloride	15.3	15	4.4	15	31	UD

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
4-Bromofluorobenzene (Surrogate)	10.000	8.59	85.9	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane (IS)	82057	8.041	107524	8.039	
Chlorobenzene-d5 (IS)	127131	11.462	202118	11.46	
1,4-Difluorobenzene (IS)	273405	9.234	405916	9.232	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-TO-15

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>		
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>		
Matrix:	<u>Air</u>	Laboratory ID:	<u>B[H0513-BLK1</u>	File ID:	<u>05AUG05.D</u>
Prepared:	<u>08/05/17 07:53</u>	Preparation:	<u>EPA TO-15</u>	Initial/Final:	<u>1 ml / 1 ml</u>
Analyzed:	<u>08/05/17 10:11</u>	Instrument:	<u>MS-A1</u>		
Batch:	<u>B[H0513</u>	Sequence:	<u>1713858</u>	Calibration:	<u>1707005</u>

CAS NO.	COMPOUND	CONC. (ug/m3)	DL	LOD	LOQ	Q
75-01-4	Vinyl chloride	1.0	0.29	1.0	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
4-Bromofluorobenzene (Surrogate)	10.000	9.10	91.0	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane (IS)	92650	8.039	107524	8.039	
Chlorobenzene-d5 (IS)	141686	11.465	202118	11.46	
1,4-Difluorobenzene (IS)	325790	9.232	405916	9.232	



AMEC Environmental & Infrastructure-
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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Air
Batch: B[H0513] Laboratory ID: B[H0513-BS1]
Preparation: EPA TO-15 Initial/Final: 1 ml / 1 ml

COMPOUND	SPIKE ADDED (ug/m3)	LCS CONCENTRATION (ug/m3)	LCS % REC. #	QC LIMITS REC.
Benzene	15.974	15.092	94.5	70 - 130
Chloroform	24.413	25.521	105	70 - 130
Ethylbenzene	21.711	20.634	95.0	70 - 130
Tetrachloroethene	33.913	33.852	99.8	70 - 130
Toluene	18.842	15.910	84.4	70 - 130
Trichloroethene	26.869	27.197	101	70 - 130
Trichlorofluoromethane	28.092	30.294	108	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	38.318	38.395	100	70 - 130
p- & m-Xylenes	43.421	45.688	105	70 - 130
o-Xylene	21.711	23.977	110	70 - 130
Total Xylenes	65.132	69.665	107	70 - 130

COMPOUND	SPIKE ADDED (ug/m3)	LCSD CONCENTRATION (ug/m3)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Benzene	15.974	15.050	94.2	0.276	30	70 - 130
Chloroform	24.413	25.536	105	0.0574	30	70 - 130
Ethylbenzene	21.711	21.398	98.6	3.64	30	70 - 130
Tetrachloroethene	33.913	34.157	101	0.898	30	70 - 130
Toluene	18.842	15.982	84.8	0.449	30	70 - 130
Trichloroethene	26.869	27.589	103	1.43	30	70 - 130
Trichlorofluoromethane	28.092	30.423	108	0.426	30	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	38.318	38.448	100	0.140	30	70 - 130
p- & m-Xylenes	43.421	47.277	109	3.42	30	70 - 130
o-Xylene	21.711	24.798	114	3.37	30	70 - 130



AMEC Environmental & Infrastructure- 9210 Sky Park Court #200 San Diego, CA 92123	Reported: 8/25/2017 9:39:35AM Project: Alameda Project Number: 5023146096 Project Manager: Kevin Olness
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LCS RECOVERY
EPA-TO-15

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Air</u>		
Batch:	<u>B[H0513</u>	Laboratory ID:	<u>B[H0513-BSD1</u>
Preparation:	<u>EPA TO-15</u>	Initial/Final:	<u>1 ml / 1 ml</u>

COMPOUND	SPIKE ADDED (ug/m3)	LCSD CONCENTRATION (ug/m3)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Total Xylenes	65.132	72.075	111	3.40	30	70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
 9210 Sky Park Court #200
 San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
 Project: Alameda
 Project Number: 5023146096
 Project Manager: Kevin Olness

**ANALYSIS BATCH (SEQUENCE) SUMMARY
 EPA-TO-15**

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1711838</u>	Instrument:	<u>MS-A1</u>
Matrix:	<u>Air</u>	Calibration:	<u>1707005</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	1711838-TUN1	05JUL03.D	07/05/17 10:48
Cal Standard	1711838-CAL1	05JUL04.D	07/05/17 11:16
Cal Standard	1711838-CAL2	05JUL05.D	07/05/17 11:45
Cal Standard	1711838-CAL3	05JUL06.D	07/05/17 12:16
Cal Standard	1711838-CAL4	05JUL07.D	07/05/17 12:54
Cal Standard	1711838-CAL5	05JUL08.D	07/05/17 13:35
Cal Standard	1711838-CAL6	05JUL09.D	07/05/17 14:19
Initial Cal Check	1711838-ICV1	05JUL10.D	07/05/17 14:50
Initial Cal Blank	1711838-ICB1	05JUL11.D	07/05/17 15:18



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
EPA-TO-15

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>05JUL03.D</u>	Injection Date:	<u>07/05/17</u>
Instrument ID:	<u>MS-A1</u>	Injection Time:	<u>10:48</u>
Sequence:	<u>1711838</u>	Lab Sample ID:	<u>1711838-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	8 - 40% of Mass 95	13.9	PASS
Mass 75	30 - 66% of Mass 95	42.2	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.96	PASS
Mass 173	Less than 2% of Mass 174	0.577	PASS
Mass 174	50 - 120% of Mass 95	98.6	PASS
Mass 175	4 - 9% of Mass 174	7.19	PASS
Mass 176	93 - 101% of Mass 174	96.4	PASS
Mass 177	5 - 9% of Mass 176	6.79	PASS



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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
EPA-TO-15

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>05AUG01.D</u>	Injection Date:	<u>08/05/17</u>
Instrument ID:	<u>MS-A1</u>	Injection Time:	<u>08:13</u>
Sequence:	<u>1713858</u>	Lab Sample ID:	<u>1713858-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	8 - 40% of Mass 95	14.8	PASS
Mass 75	30 - 66% of Mass 95	44	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.97	PASS
Mass 173	Less than 2% of Mass 174	0.533	PASS
Mass 174	50 - 120% of Mass 95	92.2	PASS
Mass 175	4 - 9% of Mass 174	7.21	PASS
Mass 176	93 - 101% of Mass 174	96.6	PASS
Mass 177	5 - 9% of Mass 176	6.87	PASS



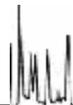
AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-A1 Calibration: 1707005
Lab File ID: 05JUL10.D Calibration Date: 07/05/17 11:16
Sequence: 1711838 Injection Date: 07/05/17
Lab Sample ID: 1711838-ICV1 Injection Time: 14:50

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.0000	6.2700	0.9381999	1.069661		14.0	30
Acrylonitrile	A	5.0000	5.6190	0.300245	0.3380316		12.6	30
Allyl chloride	A	5.0000	7.4790	0.8858086	1.332506		50.4	30 *
t-Amyl Methyl ether	A	5.0000	6.0500	0.3063703	0.3706245		21.0	30
Benzene	A	5.0000	5.6110	2.247116	2.520928		12.2	30
Benzyl chloride	L	5.0000	5.2570	1.232585	1.629016		5.1	30
Bromodichloromethane	L	5.0000	5.8020	0.3571293	0.484119		16.0	30
Bromoform	L	5.0000	5.4010	0.8674901	1.206215		8.0	30
Bromomethane	A	5.0000	5.7860	0.4050376	0.467344		15.4	30
1,3-Butadiene	A	5.0000	5.7240	0.2990079	0.3424518		14.5	30
t-Butyl alcohol	A	10.000	0.52300	0.0660913	1.706056E-02		-74.2	30 *
Carbon disulfide	A	5.0000	5.6070	2.232878	2.504516		12.2	30
Carbon tetrachloride	L	5.0000	5.6000	1.002755	1.356318		12.0	30
Chlorobenzene	A	5.0000	5.8940	0.5829377	0.6866243		17.8	30
Chloroethane	A	5.0000	5.6950	0.1937467	0.2207678		13.9	30
Chloroform	A	5.0000	5.6930	1.303478	1.483891		13.8	30
Chloromethane	A	5.0000	5.6200	0.2686218	0.3008591		12.0	30
Cyclohexane	A	5.0000	4.9340	1.498622	1.478758		-1.3	30
Dibromochloromethane	L	5.0000	5.6610	0.3533773	0.4986423		13.2	30
1,2-Dibromo-3-chloropropane	L	5.0000	5.2820	5.527531E-02	7.464925E-02		5.6	30
1,2-Dibromoethane	A	5.0000	6.0250	0.340471	0.4100729		20.4	30
Dibromomethane	A	5.0000	5.8420	0.1262679	0.1474904		16.8	30
1,2-Dichlorobenzene	A	5.0000	5.6930	0.8742511	0.9952894		13.8	30



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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-TO-15

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Instrument ID: MS-A1

Calibration: 1707005

Lab File ID: 05JUL10.D

Calibration Date: 07/05/17 11:16

Sequence: 1711838

Injection Date: 07/05/17

Lab Sample ID: 1711838-ICV1

Injection Time: 14:50

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,3-Dichlorobenzene	A	5.0000	5.1240	0.6846977	0.6611597		-3.4	30
1,4-Dichlorobenzene	A	5.0000	5.9500	1.034315	1.23641		19.5	30
Dichlorodifluoromethane	A	5.0000	6.0270	1.350237	1.629273		20.7	30
1,1-Dichloroethane	A	5.0000	5.6640	1.126148	1.275799		13.3	30
1,2-Dichloroethane	A	5.0000	5.6100	0.8167422	0.9163227		12.2	30
1,1-Dichloroethene	A	5.0000	5.6900	0.9324923	1.060664		13.7	30
cis-1,2-Dichloroethene	A	5.0000	5.6360	0.8409524	0.9480056		12.7	30
trans-1,2-Dichloroethene	A	5.0000	5.6390	1.046098	1.180494		12.8	30
1,2-Dichloropropane	A	5.0000	5.9660	0.1893834	0.225895		19.3	30
cis-1,3-Dichloropropene	A	5.0000	6.2590	0.2601857	0.3255191		25.1	30
trans-1,3-Dichloropropene	A	5.0000	6.2160	0.3015327	0.3746729		24.3	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane	A	5.0000	5.7210	0.9955037	1.139999		14.5	30
Diisopropyl ether	L	5.0000	6.4680	2.056761	3.002331		29.4	30
1,4-Dioxane	L	5.0000	3.1570	0.0890459	5.004732E-02		-36.9	30 *
Ethanol	A	10.000	12.834	0.1587773	0.195644		23.2	30
Ethyl acetate	L	5.0000	6.4680	2.056761	3.002331		29.4	30
Ethylbenzene	A	5.0000	5.7180	0.7375964	0.8435763		14.4	30
1-Ethyl-4-methylbenzene	A	5.0000	6.7910	2.429492	2.890377		19.0	30
Ethyl t-butyl ether	A	5.0000	5.8480	1.340584	1.566078		16.8	30
n-Heptane	A	5.0000	5.8510	0.1926896	0.2253625		17.0	30
Hexachlorobutadiene	A	5.0000	4.8890	0.2133066	0.208596		-2.2	30
Hexachloroethane	Q	5.0000	6.5370	4.289688E-02	5.872409E-02		30.7	30 *
Hexane	A	5.0000	6.0860	1.156985	1.408177		21.7	30



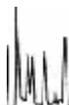
AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-A1 Calibration: 1707005
Lab File ID: 05JUL10.D Calibration Date: 07/05/17 11:16
Sequence: 1711838 Injection Date: 07/05/17
Lab Sample ID: 1711838-ICV1 Injection Time: 14:50

COMPOUND	⁽¹⁾ CAL	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone	A	5.0000	6.3290	0.3429564	0.4331818		26.3	30
Isooctane	A	5.0000	6.5120	0.859719	1.118975		30.2	30 *
Isopropyl alcohol	L	5.0000	8.7290	0.8535499	1.137333		74.6	30 *
Methylene chloride	A	5.0000	5.3070	0.7105858	0.7541867		6.1	30
Methyl ethyl ketone	A	5.0000	5.7500	1.314289	1.511938		15.0	30
Methyl iodide	A	5.0000	5.5080	1.243816	1.370206		10.2	30
Methyl isobutyl ketone	A	5.0000	6.3720	0.3642647	0.4634721		27.2	30
Methyl t-butyl ether	A	5.0000	5.7910	2.059919	2.391131		16.1	30
Naphthalene	L	5.0000	4.7780	0.1111196	0.1242883		-4.4	30
Propylene	A	5.0000	5.4450	0.500643	0.5460664		9.1	30
Styrene	A	5.0000	5.8550	1.282017	1.501356		17.1	30
1,1,1,2-Tetrachloroethane	A	5.0000	5.6850	0.137037	0.190174		38.8	30 *
1,1,2,2-Tetrachloroethane	A	5.0000	6.6130	0.9780413	1.293683		32.3	30 *
Tetrachloroethene	A	5.0000	5.7470	0.3903883	0.4485804		14.9	30
1,1,1,2-Tetrafluoroethane	A	5.0000	0.0000					30
Tetrahydrofuran	A	5.0000	5.9280	0.7229237	0.8571347		18.6	30
Toluene	A	5.0000	5.6340	0.8803759	0.9914308		12.6	30
1,2,4-Trichlorobenzene	A	5.0000	4.6230	0.1300734	0.120264		-7.5	30
1,1,1-Trichloroethane	A	5.0000	6.1190	1.108072	1.355791		22.4	30
1,1,2-Trichloroethane	A	5.0000	5.8200	0.2318708	0.2697347		16.3	30
Trichloroethene	A	5.0000	5.8070	0.2806408	0.325851		16.1	30
Trichlorofluoromethane	A	5.0000	5.6810	1.485929	1.684412		13.4	30
1,2,3-Trichloropropane	A	5.0000	5.8110	0.3542446	0.4113969		16.1	30



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Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-A1 Calibration: 1707005
Lab File ID: 05JUL10.D Calibration Date: 07/05/17 11:16
Sequence: 1711838 Injection Date: 07/05/17
Lab Sample ID: 1711838-ICV1 Injection Time: 14:50

COMPOUND	⁽¹⁾ CAL	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,2-Trichloro-1,2,2-trifluoroethane	A	5.0000	5.5370	1.354859	1.500346		10.7	30
1,2,4-Trimethylbenzene	A	5.0000	5.8240	1.46732	1.70907		16.5	30
1,3,5-Trimethylbenzene	A	5.0000	5.7800	1.436879	1.661058		15.6	30
Vinyl acetate	A	5.0000	6.4220	1.820086	2.337518		28.4	30
Vinyl bromide	A	5.0000	5.5690	0.7758316	0.8620397		11.1	30
Vinyl chloride	A	5.0000	5.7390	0.3654827	0.419677		14.8	30
p- & m-Xylenes	A	10.000	12.145	1.644029	1.996738		21.5	30
o-Xylene	A	5.0000	6.1240	1.646745	2.016809		22.5	30
Total Xylenes	A	15.000	18.269	1.644934	2.003428		21.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-A1 Calibration: 1707005
Lab File ID: 05AUG03.D Calibration Date: 07/05/17 11:16
Sequence: 1713858 Injection Date: 08/05/17
Lab Sample ID: 1713858-CCV2 Injection Time: 09:15

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.0000	10.425	0.9381999	1.77858		89.6	30 *
Acrylonitrile	A	50.000	7.2790	0.300245	4.378929E-02		-85.4	30 *
Allyl chloride	A	5.0000	8.2130	0.8858086	1.463171		65.2	30 *
t-Amyl Methyl ether	A	50.000	8.2170	0.3063703	5.034046E-02		-83.6	30 *
Benzene	A	5.0000	4.8090	2.247116	2.16069		-3.8	30
Benzyl chloride	L	5.0000	4.9310	1.232585	1.512701		-1.4	30
Bromodichloromethane	L	5.0000	5.7210	0.3571293	0.4769164		14.4	30
Bromoform	L	5.0000	4.4580	0.8674901	0.9514838		-10.8	30
Bromomethane	A	5.0000	5.2140	0.4050376	0.4211897		4.0	30
1,3-Butadiene	A	5.0000	5.1810	0.2990079	0.3099401		3.7	30
t-Butyl alcohol	A	100.00	0.46800	0.0660913	1.526171E-03		-97.7	30 *
Carbon disulfide	A	5.0000	4.9460	2.232878	2.209125		-1.1	30
Carbon tetrachloride	L	5.0000	5.3450	1.002755	1.279342		6.9	30
Chlorobenzene	A	5.0000	5.1480	0.5829377	0.5998187		2.9	30
Chloroethane	A	5.0000	5.0790	0.1937467	0.1968863		1.6	30
Chloroform	A	5.0000	5.0820	1.303478	1.324746		1.6	30
Chloromethane	A	5.0000	5.0170	0.2686218	0.2685726		-0.02	30
Cyclohexane	A	5.0000	4.7480	1.498622	1.42318		-5.0	30
Dibromochloromethane	L	5.0000	5.2430	0.3533773	0.4559909		4.9	30
1,2-Dibromo-3-chloropropane	L	50.000	18.963	5.527531E-02	3.091362E-02		-62.1	30 *
1,2-Dibromoethane	A	5.0000	5.1650	0.340471	0.3515506		3.3	30
Dibromomethane	A	50.000	7.4530	0.1262679	1.881473E-02		-85.1	30 *
1,2-Dichlorobenzene	A	5.0000	6.6450	0.8742511	1.161787		32.9	30 *



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-A1 Calibration: 1707005
Lab File ID: 05AUG03.D Calibration Date: 07/05/17 11:16
Sequence: 1713858 Injection Date: 08/05/17
Lab Sample ID: 1713858-CCV2 Injection Time: 09:15

COMPOUND	⁽¹⁾ CAL	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,3-Dichlorobenzene	A	5.0000	7.1360	0.6846977	0.9207394		34.5	30 *
1,4-Dichlorobenzene	A	5.0000	6.0780	1.034315	1.263054		22.1	30
Dichlorodifluoromethane	A	5.0000	5.5900	1.350237	1.511049		11.9	30
1,1-Dichloroethane	A	5.0000	5.1250	1.126148	1.15431		2.5	30
1,2-Dichloroethane	A	5.0000	5.0380	0.8167422	0.8228861		0.8	30
1,1-Dichloroethene	A	5.0000	5.1990	0.9324923	0.9691604		3.9	30
cis-1,2-Dichloroethene	A	5.0000	5.0200	0.8409524	0.8443324		0.4	30
trans-1,2-Dichloroethene	A	5.0000	4.9850	1.046098	1.043637		-0.2	30
1,2-Dichloropropane	A	5.0000	5.3690	0.1893834	0.2033031		7.4	30
cis-1,3-Dichloropropene	A	5.0000	5.5210	0.2601857	0.2871382		10.4	30
trans-1,3-Dichloropropene	A	5.0000	5.3550	0.3015327	0.322786		7.0	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane	A	5.0000	5.3060	0.9955037	1.05729		6.2	30
Diisopropyl ether	L	50.000	6.5400	2.056761	0.3034727		-86.9	30 *
1,4-Dioxane	L	5.0000	2.8070	0.0890459	4.448704E-02		-43.9	30 *
Ethanol	A	100.00	16.596	0.1587773	2.529947E-02		-84.1	30 *
Ethyl acetate	L	5.0000	6.5400	2.056761	3.034727		30.8	30 *
Ethylbenzene	A	5.0000	4.1920	0.7375964	0.6184506		-16.2	30
1-Ethyl-4-methylbenzene	A	5.0000	5.9230	2.429492	2.521171		3.8	30
Ethyl t-butyl ether	A	50.000	7.3460	1.340584	0.196717		-85.3	30 *
n-Heptane	A	5.0000	5.5470	0.1926896	0.2136255		10.9	30
Hexachlorobutadiene	A	5.0000	17.408	0.2133066	0.7426751		248	30 *
Hexachloroethane	Q	50.000	12.171	4.289688E-02	1.574365E-02		-75.7	30 *
Hexane	A	5.0000	5.6960	1.156985	1.318069		13.9	30



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CONTINUING CALIBRATION CHECK
EPA-TO-15

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Instrument ID: MS-A1

Calibration: 1707005

Lab File ID: 05AUG03.D

Calibration Date: 07/05/17 11:16

Sequence: 1713858

Injection Date: 08/05/17

Lab Sample ID: 1713858-CCV2

Injection Time: 09:15

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone	A	5.0000	6.1640	0.3429564	0.4219395		23.0	30
Isooctane	A	5.0000	6.0250	0.859719	1.035308		20.4	30
Isopropyl alcohol	L	5.0000	8.7920	0.8535499	1.145493		75.8	30 *
Methylene chloride	A	5.0000	5.0230	0.7105858	0.7137197		0.4	30
Methyl ethyl ketone	A	5.0000	5.4430	1.314289	1.431253		8.9	30
Methyl iodide	A	50.000	6.7240	1.243816	0.1672817		-86.6	30 *
Methyl isobutyl ketone	A	5.0000	6.1530	0.3642647	0.4475409		22.9	30
Methyl t-butyl ether	A	5.0000	5.0750	2.059919	2.095607		1.7	30
Naphthalene	L	50.000	6.5780	0.1111196	1.820422E-02		-86.8	30 *
Propylene	A	5.0000	5.2460	0.500643	0.5260965		5.1	30
Styrene	A	5.0000	4.5560	1.282017	1.168248		-8.9	30
1,1,1,2-Tetrachloroethane	A	50.000	8.4850	0.137037	2.946225E-02		-78.5	30 *
1,1,2,2-Tetrachloroethane	A	5.0000	5.7540	0.9780413	1.125491		15.1	30
Tetrachloroethene	A	5.0000	4.7120	0.3903883	0.3678249		-5.8	30
1,1,1,2-Tetrafluoroethane	A	50.000	0.0000					30
Tetrahydrofuran	A	5.0000	5.6950	0.7229237	0.8234627		13.9	30
Toluene	A	5.0000	4.0510	0.8803759	0.7128716		-19.0	30
1,2,4-Trichlorobenzene	A	5.0000	19.344	0.1300734	0.5032407		287	30 *
1,1,1-Trichloroethane	A	5.0000	5.4410	1.108072	1.205554		8.8	30
1,1,2-Trichloroethane	A	5.0000	4.9630	0.2318708	0.2300082		-0.8	30
Trichloroethene	A	5.0000	4.9030	0.2806408	0.2751505		-2.0	30
Trichlorofluoromethane	A	5.0000	5.1390	1.485929	1.523585		2.5	30
1,2,3-Trichloropropane	A	50.000	10.100	0.3542446	7.150674E-02		-79.8	30 *



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CONTINUING CALIBRATION CHECK
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Instrument ID: MS-A1 Calibration: 1707005
Lab File ID: 05AUG03.D Calibration Date: 07/05/17 11:16
Sequence: 1713858 Injection Date: 08/05/17
Lab Sample ID: 1713858-CCV2 Injection Time: 09:15

COMPOUND	⁽¹⁾ CAL TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,2-Trichloro-1,2,2-trifluoroethane	A	5.0000	4.9650	1.354859	1.345281		-0.7	30
1,2,4-Trimethylbenzene	A	5.0000	6.1250	1.46732	1.797475		22.5	30
1,3,5-Trimethylbenzene	A	5.0000	5.5420	1.436879	1.592713		10.8	30
Vinyl acetate	A	5.0000	7.0420	1.820086	2.563093		40.8	30 *
Vinyl bromide	A	5.0000	4.7630	0.7758316	0.7373052		-5.0	30
Vinyl chloride	A	5.0000	5.1110	0.3654827	0.3737584		2.3	30
p- & m-Xylenes	A	10.000	8.9560	1.644029	1.472526		-10.4	30
o-Xylene	A	5.0000	4.6720	1.646745	1.538576		-6.6	30
Total Xylenes	A	15.000	13.628	1.644934	1.494543		-9.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1711838 Instrument: MS-A1
Matrix: Air Calibration: 1707005

Table with 9 columns: Surrogate Compound, Spike Level ppbv, % Recovery, Recovery Limits, RT, Calibration Mean RT, RT Diff, RT Diff Limit, Q. Rows include Cal Standard (1711838-CAL1) through (1711838-CAL6), Initial Cal Check (1711838-ICV1), and Initial Cal Blank (1711838-ICB1).



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713858 Instrument: MS-A1
Matrix: Air Calibration: 1707005

Surrogate Compound	Spike Level ppbv	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (1713858-CCV2)			Lab File ID: 05AUG03.D		Analyzed: 08/05/17 09:15			
4-Bromofluorobenzene (Surrogate)	10.000	114	70 - 130	12.172	12.18117	-0.0092	+/-1.0	
Calibration Blank (1713858-CCB1)			Lab File ID: 05AUG04.D		Analyzed: 08/05/17 09:43			
4-Bromofluorobenzene (Surrogate)	10.000	97.9	70 - 130	12.172	12.18117	-0.0092	+/-1.0	
Blank (B[H0513-BLK1])			Lab File ID: 05AUG05.D		Analyzed: 08/05/17 10:11			
4-Bromofluorobenzene (Surrogate)	10.000	91.0	70 - 130	12.172	12.18117	-0.0092	+/-1.0	
LCS (B[H0513-BS1])			Lab File ID: 05AUG06.D		Analyzed: 08/05/17 10:42			
4-Bromofluorobenzene (Surrogate)	10.000	93.6	70 - 130	12.172	12.18117	-0.0092	+/-1.0	
LCS Dup (B[H0513-BSD1])			Lab File ID: 05AUG07.D		Analyzed: 08/05/17 11:14			
4-Bromofluorobenzene (Surrogate)	10.000	91.1	70 - 130	12.17	12.18117	-0.0112	+/-1.0	
MG1-04-D-R_170725 (1720405-12)			Lab File ID: 05AUG16.D		Analyzed: 08/05/17 15:40			
4-Bromofluorobenzene (Surrogate)	10.000	85.9	70 - 130	12.159	12.18117	-0.0222	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INTERNAL STANDARD AREA AND RT SUMMARY
EPA-TO-15**

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1711838 Instrument: MS-A1
Matrix: Air Calibration: 1707005

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1711838-CAL1)			Lab File ID: 05JUL04.D			Analyzed: 07/05/17 11:16			
Bromochloromethane (IS)	154510	8.044	150854	8.047	102	50 - 200	-0.0030	+/-0.50	
Chlorobenzene-d5 (IS)	255979	11.466	253601	11.468	101	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene (IS)	597745	9.238	593191	9.236	101	50 - 200	0.0020	+/-0.50	
Cal Standard (1711838-CAL2)			Lab File ID: 05JUL05.D			Analyzed: 07/05/17 11:45			
Bromochloromethane (IS)	151794	8.045	150854	8.047	101	50 - 200	-0.0020	+/-0.50	
Chlorobenzene-d5 (IS)	250791	11.466	253601	11.468	99	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene (IS)	585940	9.238	593191	9.236	99	50 - 200	0.0020	+/-0.50	
Cal Standard (1711838-CAL3)			Lab File ID: 05JUL06.D			Analyzed: 07/05/17 12:16			
Bromochloromethane (IS)	150854	8.047	150854	8.047	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	253601	11.468	253601	11.468	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	593191	9.236	593191	9.236	100	50 - 200	0.0000	+/-0.50	
Cal Standard (1711838-CAL4)			Lab File ID: 05JUL07.D			Analyzed: 07/05/17 12:54			
Bromochloromethane (IS)	148421	8.046	150854	8.047	98	50 - 200	-0.0010	+/-0.50	
Chlorobenzene-d5 (IS)	256725	11.467	253601	11.468	101	50 - 200	-0.0010	+/-0.50	
1,4-Difluorobenzene (IS)	599974	9.239	593191	9.236	101	50 - 200	0.0030	+/-0.50	
Cal Standard (1711838-CAL5)			Lab File ID: 05JUL08.D			Analyzed: 07/05/17 13:35			
Bromochloromethane (IS)	144416	8.048	150854	8.047	96	50 - 200	0.0010	+/-0.50	
Chlorobenzene-d5 (IS)	256616	11.469	253601	11.468	101	50 - 200	0.0010	+/-0.50	
1,4-Difluorobenzene (IS)	603061	9.236	593191	9.236	102	50 - 200	0.0000	+/-0.50	
Cal Standard (1711838-CAL6)			Lab File ID: 05JUL09.D			Analyzed: 07/05/17 14:19			
Bromochloromethane (IS)	141415	8.045	150854	8.047	94	50 - 200	-0.0020	+/-0.50	
Chlorobenzene-d5 (IS)	256168	11.466	253601	11.468	101	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene (IS)	605429	9.238	593191	9.236	102	50 - 200	0.0020	+/-0.50	
Initial Cal Check (1711838-ICV1)			Lab File ID: 05JUL10.D			Analyzed: 07/05/17 14:50			
Bromochloromethane (IS)	140265	8.045	150854	8.047	93	50 - 200	-0.0020	+/-0.50	
Chlorobenzene-d5 (IS)	236064	11.466	253601	11.468	93	50 - 200	-0.0020	+/-0.50	
1,4-Difluorobenzene (IS)	548361	9.238	593191	9.236	92	50 - 200	0.0020	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Project: Alameda
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Project Manager: Kevin Olness

INTERNAL STANDARD AREA AND RT SUMMARY
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713858 Instrument: MS-A1
Matrix: Air Calibration: 1707005

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (1713858-CCV2)			Lab File ID: 05AUG03.D			Analyzed: 08/05/17 09:15			
Bromochloromethane (IS)	107524	8.039	150854	8.047	71	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5 (IS)	202118	11.46	253601	11.468	80	50 - 200	-0.0080	+/-0.50	
1,4-Difluorobenzene (IS)	405916	9.232	593191	9.236	68	50 - 200	-0.0040	+/-0.50	
Calibration Blank (1713858-CCB1)			Lab File ID: 05AUG04.D			Analyzed: 08/05/17 09:43			
Bromochloromethane (IS)	97031	8.039	107524	8.039	90	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	148580	11.46	202118	11.46	74	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	343659	9.232	405916	9.232	85	50 - 200	0.0000	+/-0.50	
Blank (B[H0513-BLK1])			Lab File ID: 05AUG05.D			Analyzed: 08/05/17 10:11			
Bromochloromethane (IS)	92650	8.039	107524	8.039	86	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	141686	11.465	202118	11.46	70	50 - 200	0.0050	+/-0.50	
1,4-Difluorobenzene (IS)	325790	9.232	405916	9.232	80	50 - 200	0.0000	+/-0.50	
LCS (B[H0513-BS1])			Lab File ID: 05AUG06.D			Analyzed: 08/05/17 10:42			
Bromochloromethane (IS)	95916	8.044	107524	8.039	89	50 - 200	0.0050	+/-0.50	
Chlorobenzene-d5 (IS)	158345	11.465	202118	11.46	78	50 - 200	0.0050	+/-0.50	
1,4-Difluorobenzene (IS)	347614	9.232	405916	9.232	86	50 - 200	0.0000	+/-0.50	
LCS Dup (B[H0513-BSD1])			Lab File ID: 05AUG07.D			Analyzed: 08/05/17 11:14			
Bromochloromethane (IS)	97736	8.042	107524	8.039	91	50 - 200	0.0030	+/-0.50	
Chlorobenzene-d5 (IS)	155160	11.463	202118	11.46	77	50 - 200	0.0030	+/-0.50	
1,4-Difluorobenzene (IS)	348136	9.235	405916	9.232	86	50 - 200	0.0030	+/-0.50	
MG1-04-D-R_170725 (1720405-12)			Lab File ID: 05AUG16.D			Analyzed: 08/05/17 15:40			
Bromochloromethane (IS)	82057	8.041	107524	8.039	76	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5 (IS)	127131	11.462	202118	11.46	63	50 - 200	0.0020	+/-0.50	
1,4-Difluorobenzene (IS)	273405	9.234	405916	9.232	67	50 - 200	0.0020	+/-0.50	



AMEC Environmental & Infrastructure- 9210 Sky Park Court #200 San Diego, CA 92123	Reported: 8/25/2017 9:39:35AM Project: Alameda Project Number: 5023146096 Project Manager: Kevin Olness
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**INITIAL CALIBRATION STANDARDS
EPA-TO-15**

Laboratory:	BC Laboratories	SDG:	17-20405
Client:	AMEC Environmental & Infrastructure- \$AMCN	Project:	Alameda
Sequence:	1711838	Instrument:	MS-A1
Calibration:	1707005		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
7D18063	TO-3/TO-14A/TO-15 BFB Working Std.	1711838-TUN1	05JUL03.D	07/05/17 10:48
7G05026	TO-14A / TO-15 CAL1 (reg+extra)	1711838-CAL1	05JUL04.D	07/05/17 11:16
7G05027	TO-14A / TO-15 CAL2 (reg+extra)	1711838-CAL2	05JUL05.D	07/05/17 11:45
7G05028	TO-14A / TO-15 CAL3 (reg+extra)	1711838-CAL3	05JUL06.D	07/05/17 12:16
7G05029	TO-14A / TO-15 CAL4 (reg+extra)	1711838-CAL4	05JUL07.D	07/05/17 12:54
7G05030	TO-14A / TO-15 CAL5 (reg+extra)	1711838-CAL5	05JUL08.D	07/05/17 13:35
7G05031	TO-14A / TO-15 CAL6 (reg+extra)	1711838-CAL6	05JUL09.D	07/05/17 14:19



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Reported: 8/25/2017 9:39:35AM
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Project Manager: Kevin Olness

INITIAL CALIBRATION DATA
EPA-TO-15

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707005

Instrument: MS-A1

Matrix: Air

Calibration Date: 07/05/17 11:16

Table with 13 columns: Compound, Level 01 (ppbv, RF), Level 02 (ppbv, RF), Level 03 (ppbv, RF), Level 04 (ppbv, RF), Level 05 (ppbv, RF), Level 06 (ppbv, RF). Rows include compounds like Acetone, Acrylonitrile, Allyl chloride, etc.



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9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA
EPA-TO-15

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Calibration: 1707005

Instrument: MS-A1

Matrix: Air

Calibration Date: 07/05/17 11:16

Table with 13 columns: Compound, Level 01 (ppbv, RF), Level 02 (ppbv, RF), Level 03 (ppbv, RF), Level 04 (ppbv, RF), Level 05 (ppbv, RF), Level 06 (ppbv, RF). Rows include various compounds like Dichlorodifluoromethane, Ethanol, Hexachloroethane, etc.



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Table with 13 columns: Compound, Level 01 (ppbv, RF), Level 02 (ppbv, RF), Level 03 (ppbv, RF), Level 04 (ppbv, RF), Level 05 (ppbv, RF), Level 06 (ppbv, RF). Rows include various compounds like Methyl iodide, Styrene, and Vinyl acetate.



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EPA-TO-15

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707005

Instrument: MS-A1

Matrix: Air

Calibration Date: 07/05/17 11:16

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ppbv	RF	ppbv	RF								
Total Xylenes	1.5	1.350866	3	1.717871	15	1.881018	45	1.747598	60	1.639932	75	1.53232
4-Bromofluorobenzene (Surrogate)	10	1.323855	10	1.330889	10	1.358311	10	1.390239	10	1.415286	10	1.45305



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INITIAL CALIBRATION DATA (Continued)
EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Calibration: 1707005 Instrument: MS-A1
Matrix: Air Calibration Date: 07/05/17 11:16

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acetone	0.9381999	17.03261	5.714	0.7500467			30	
Acrylonitrile	0.300245	19.70875	6.062167	0.2148533			30	
Allyl chloride	0.8858086	23.53523	6.546167	3.440485E-02			30	
t-Amyl Methyl ether	0.3063703	21.67098	9.4285	0.2713072			30	
Benzene	2.247116	14.53677	9.0545	1.851331E-02			30	
Benzyl chloride	1.232585	52.86022	12.9205	3.213555E-02	0.99964			
Bromodichloromethane	0.3571293	32.56669	9.623333	1.699452E-02	0.99979			
Bromoform	0.8674901	59.7295	11.80133	3.101833E-02	0.99887			
Bromomethane	0.4050376	17.6043	4.979833	4.828106E-02			30	
1,3-Butadiene	0.2990079	18.04016	4.728167	0.0385495			30	
t-Butyl alcohol	0.0660913	168.9824	6.4042	1.752952			30	*
Carbon disulfide	2.232878	16.40263	6.727833	2.118447E-02			30	
Carbon tetrachloride	1.002755	47.63895	9.143333	3.355416E-02	0.99651			
Chlorobenzene	0.5829377	15.94558	11.49	0.0303711			30	
Chloroethane	0.1937467	17.83223	5.1335	4.586571E-02			30	
Chloroform	1.303478	17.44396	8.129333	3.793146E-02			30	
Chloromethane	0.2686218	19.13257	4.402667	2.979887E-02			30	
Cyclohexane	1.498622	19.02661	9.222	6.202611E-02			30	
Dibromochloromethane	0.3533773	49.08526	10.83033	1.598741E-02	0.99935			
1,2-Dibromo-3-chloropropane	5.527531E-02	60.86277	13.461	4.808743E-02	0.99912			
1,2-Dibromoethane	0.340471	21.65263	10.95367	1.942925E-02			30	
Dibromomethane	0.1262679	16.02354	9.503667	1.251757E-02			30	
1,2-Dichlorobenzene	0.8742511	24.70579	13.18583	3.845111E-02			30	
1,3-Dichlorobenzene	0.6846977	23.69691	12.97583	4.004966E-02			30	
1,4-Dichlorobenzene	1.034315	26.44283	12.93917	3.155375E-02			30	
Dichlorodifluoromethane	1.350237	13.82096	4.2535	0.0532831			30	



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INITIAL CALIBRATION DATA (Continued)

EPA-TO-15

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Calibration: 1707005 Instrument: MS-A1
Matrix: Air Calibration Date: 07/05/17 11:16

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1-Dichloroethane	1.126148	16.93217	7.349333	1.197877E-02			30	
1,2-Dichloroethane	0.8167422	16.96311	8.612667	2.240072E-02			30	
1,1-Dichloroethene	0.9324923	17.48171	6.353167	0.0383776			30	
cis-1,2-Dichloroethene	0.8409524	17.44241	7.934	2.606998E-02			30	
trans-1,2-Dichloroethene	1.046098	16.46445	7.192167	3.269331E-02			30	
1,2-Dichloropropane	0.1893834	13.76579	9.5235	1.085262E-02			30	
cis-1,3-Dichloropropene	0.2601857	27.38876	10.36583	9.733348E-03			30	
trans-1,3-Dichloropropene	0.3015327	23.48951	10.10117	2.328242E-02			30	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.9955037	16.08796	4.492333	5.252831E-02			30	
Diisopropyl ether	2.056761	43.11326	8.0808	0.1305899	0.99550			
1,4-Dioxane	0.0890459	46.87331	9.6706	7.004383E-02	0.98131			
Ethanol	0.1587773	20.17206	5.276833	0.650815			30	
Ethyl acetate	2.056761	43.11326	8.0808	0.1305899	0.99550			
Ethylbenzene	0.7375964	15.77739	11.65217	0.0152381			30	
1-Ethyl-4-methylbenzene	2.429492	18.6143	12.56217	1.320457E-02			30	
Ethyl t-butyl ether	1.340584	20.6893	8.456333	0.3635269			30	
n-Heptane	0.1926896	11.67981	9.790667	5.228962E-03			30	
Hexachlorobutadiene	0.2133066	24.68045	14.77117	5.462223E-02			30	
Hexachloroethane	4.289688E-02	69.32015	13.62217	3.569984E-02		0.9968018		
Hexane	1.156985	12.1372	8.074667	1.020374E-02			30	
2-Hexanone	0.3429564	24.76582	10.7755	0.1639835			30	
Isooctane	0.859719	15.68191	9.667667	1.900953E-02			30	
Isopropyl alcohol	0.8535499	30.38167	5.9535	0.8124559	0.99983			
Methylene chloride	0.7105858	3.629815	6.437667	4.439534E-02			30	
Methyl ethyl ketone	1.314289	17.79247	7.670167	0.4980977			30	
Methyl iodide	1.243816	19.51733	6.297667	2.702187E-02			30	



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INITIAL CALIBRATION DATA (Continued)

EPA-TO-15

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Calibration: 1707005

Instrument: MS-A1

Matrix: Air

Calibration Date: 07/05/17 11:16

Table with 9 columns: Compound, Mean RF, RF RSD, Mean RT, RT RSD, Linear r, Quad COD, LIMIT, Q. Lists various compounds like Methyl isobutyl ketone, Naphthalene, Styrene, etc., with their respective calibration data.



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HOLDING TIME SUMMARY
EPA-TO-15

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
MG1-04-D-R_170725	07/25/17 09:55	07/25/17 22:20	08/05/17 07:53	11.00	30.00	08/05/17 15:40	11.00	30.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument MS-A1



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Samples

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG16.D
 Acq On : 5 Aug 2017 3:40 pm
 Operator : MJB
 Sample : 1720405-12
 Misc : 15.3 Vol 40mL #1482 I:13 F:20
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 07 10:11:13 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.041	49	82057	10.000	ppbv	0.000
42) 1,4-Difluorobenzene	9.234	114	273405	10.000	ppbv	0.000
62) Chlorobenzene-d5	11.462	82	127131	10.000	ppbv	0.000

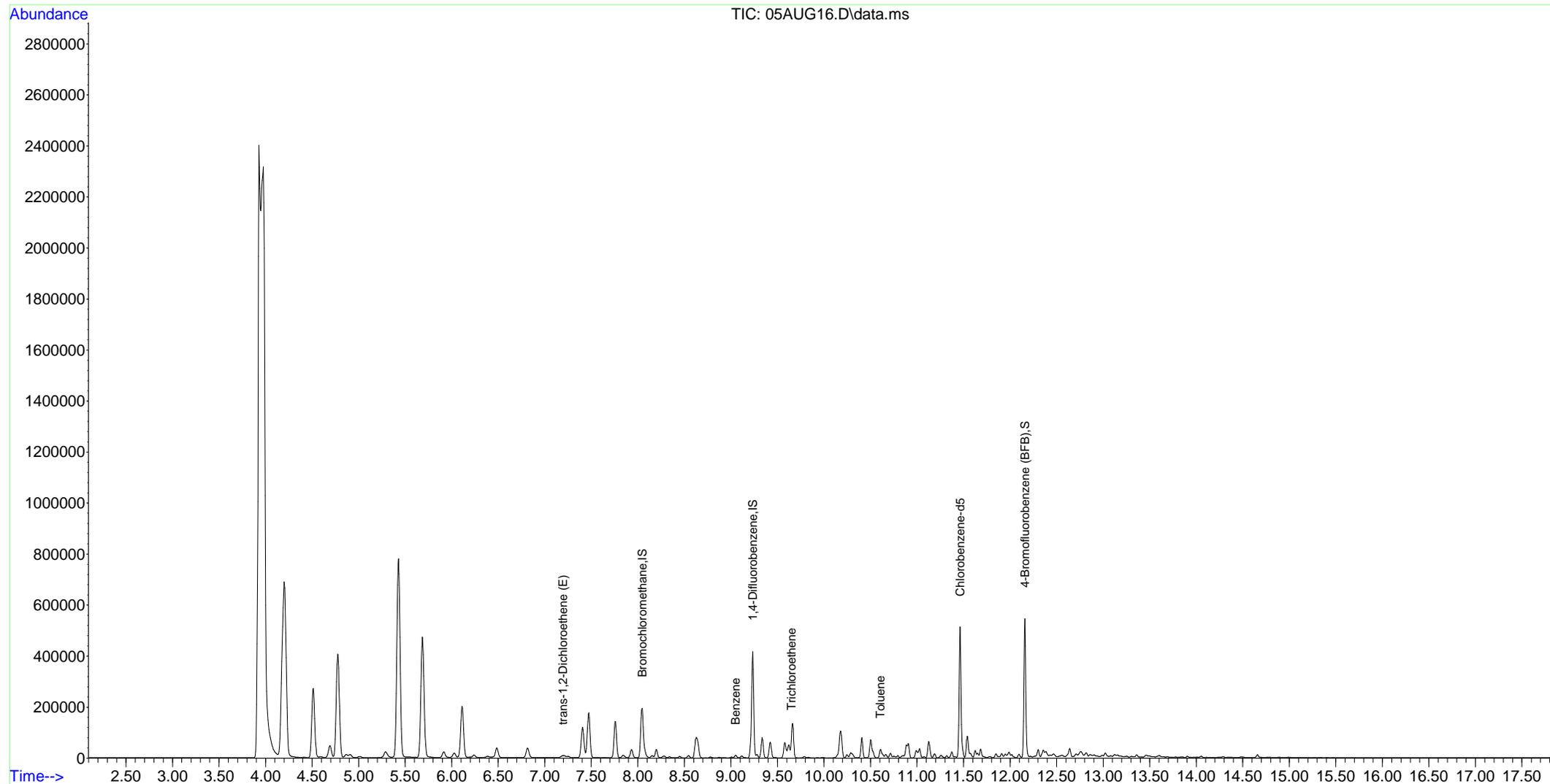
System Monitoring Compounds
 70) 4-Bromofluorobenzene (... 12.159 95 150538 8.590 ppbv -0.022
 Spiked Amount 10.000 Range 70 - 130 Recovery = 85.900%

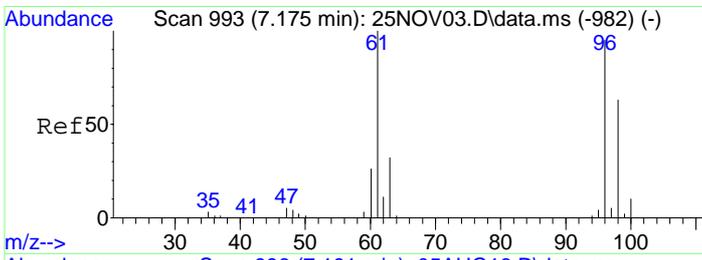
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
25) trans-1,2-Dichloroethe...	7.191	61	2998	0.349	ppbv	84
39) Benzene	9.055	78	8080	0.438	ppbv	98
47) Trichloroethene	9.644	130	3541	0.462	ppbv	97
55) Toluene	10.607	91	10540	0.438	ppbv	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG16.D
 Acq On : 5 Aug 2017 3:40 pm
 Operator : MJB
 Sample : 1720405-12
 Misc : 15.3 Vol 40mL #1482 I:13 F:20
 ALS Vial : 8 Sample Multiplier: 1

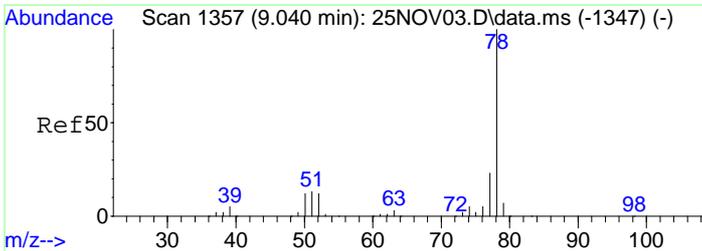
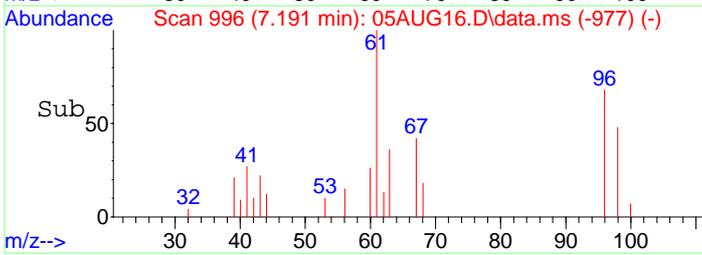
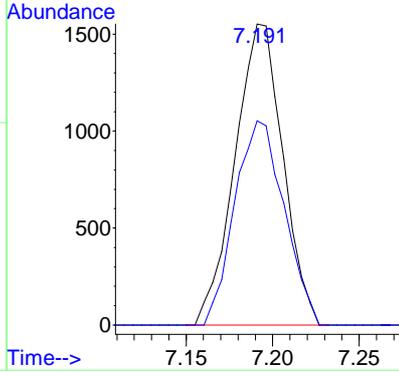
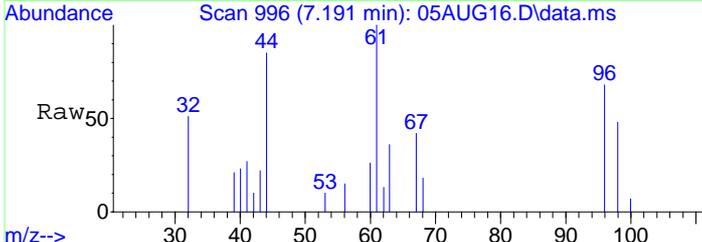
Quant Time: Aug 07 10:11:13 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration





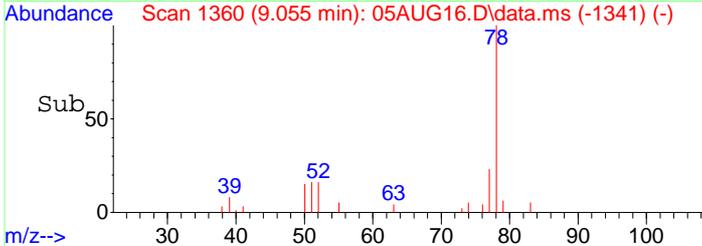
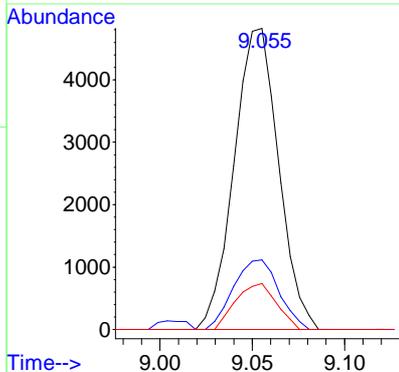
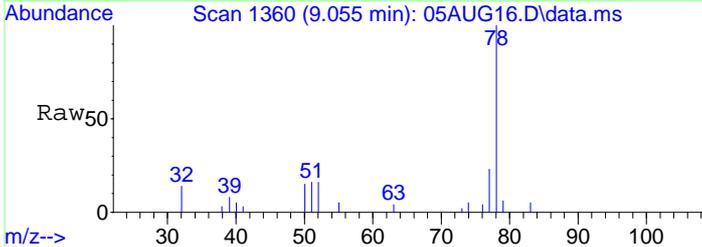
#25
 trans-1,2-Dichloroethene (E)
 Concen: 0.349 ppbv
 RT: 7.191 min Scan# 996
 Delta R.T. -0.001 min
 Lab File: 05AUG16.D
 Acq: 5 Aug 2017 3:40 pm

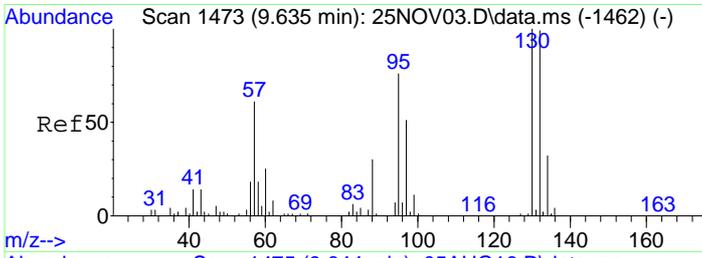
Tgt Ion	Resp	Lower	Upper
61	2998		
61	100		
96	69.8	67.4	101.2



#39
 Benzene
 Concen: 0.438 ppbv
 RT: 9.055 min Scan# 1360
 Delta R.T. -0.001 min
 Lab File: 05AUG16.D
 Acq: 5 Aug 2017 3:40 pm

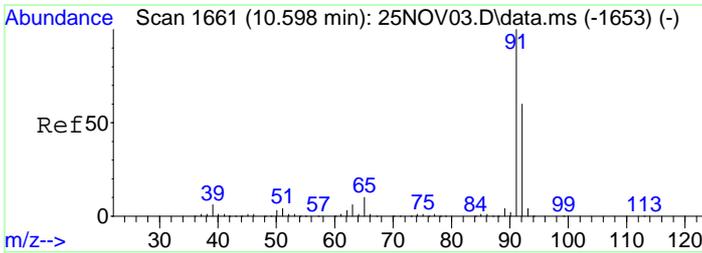
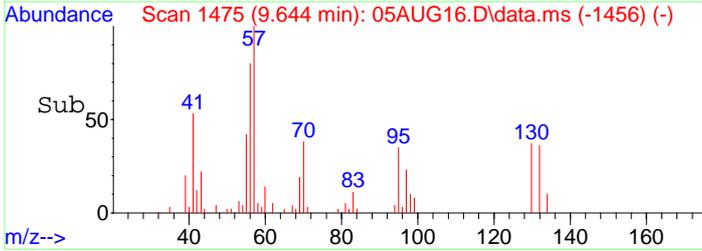
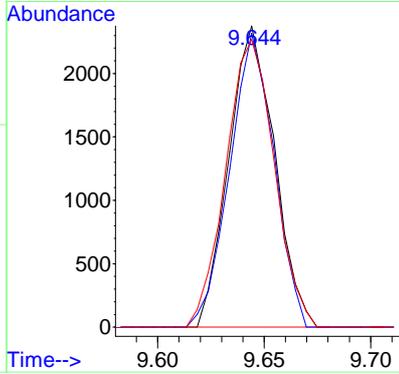
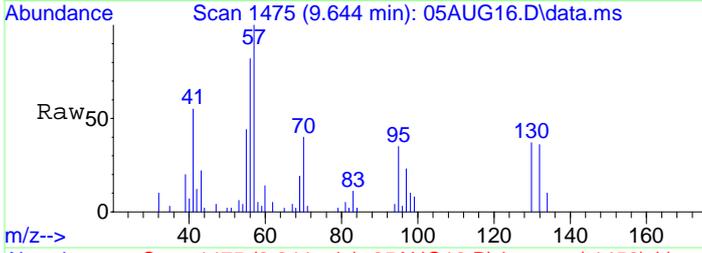
Tgt Ion	Resp	Lower	Upper
78	8080		
78	100		
77	23.6	19.0	28.4
50	14.0	9.6	14.4





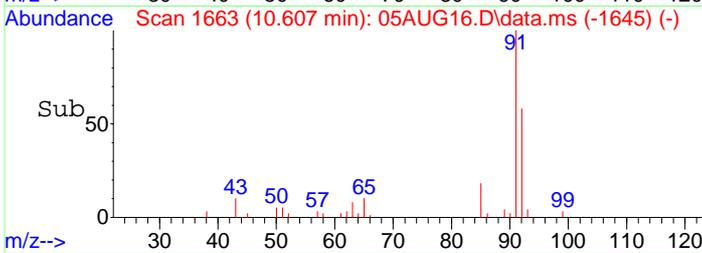
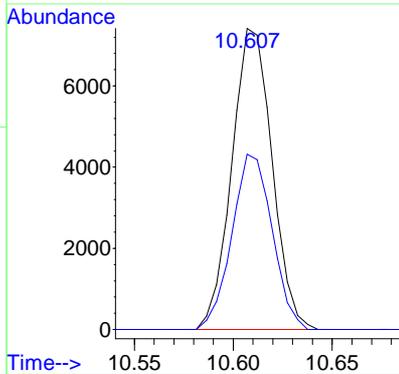
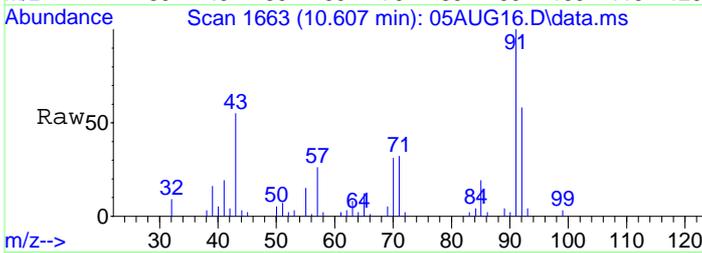
#47
 Trichloroethene
 Concen: 0.462 ppbv
 RT: 9.644 min Scan# 1475
 Delta R.T. -0.001 min
 Lab File: 05AUG16.D
 Acq: 5 Aug 2017 3:40 pm

Tgt Ion	Ratio	Lower	Upper
130	100		
132	94.2	76.9	115.3
95	101.4	77.1	115.7



#55
 Toluene
 Concen: 0.438 ppbv
 RT: 10.607 min Scan# 1663
 Delta R.T. -0.006 min
 Lab File: 05AUG16.D
 Acq: 5 Aug 2017 3:40 pm

Tgt Ion	Ratio	Lower	Upper
91	100		
92	58.2	47.8	71.6





Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Calibration Standards

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL04.D
 Acq On : 5 Jul 2017 11:16 am
 Operator : MJB
 Sample : 1711838-CAL1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:51:52 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.044	49	154510	10.000	ppbv	0.000
41) 1,4-Difluorobenzene	9.238	114	597745	10.000	ppbv	0.000
61) Chlorobenzene-d5	11.466	82	255979	10.000	ppbv	0.000

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) 4-Bromofluorobenzene (...)	12.177	95	338879	9.603	ppbv	0.000
Spiked Amount	10.000	Range	70 - 130	Recovery	=	96.030%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Propene	4.188	41	3277	0.423	ppbv	97
4) Dichlorodifluoromethane	4.255	85	7767	0.372	ppbv #	94
5) Chloromethane	4.403	50	1344	0.325	ppbv	91
6) 1,2-Dichloro-1,1,2,2-t...	4.490	85	5201	0.338	ppbv	96
7) Vinyl chloride	4.598	62	1740	0.308	ppbv	90
8) 1,3-Butadiene	4.726	54	1506	0.326	ppbv	99
9) Bromomethane	4.977	94	2081	0.333	ppbv	97
10) Ethyl chloride	5.130	64	988	0.330	ppbv #	82
11) Ethanol	5.320	45	1530	0.650	ppbv #	86
12) Vinyl bromide	5.448	106	3988	0.333	ppbv #	90
13) Trichlorofluoromethane	5.812	101	7600	0.332	ppbv	99
14) Acetone	5.771	43	4984	0.378	ppbv	95
15) Isopropyl alcohol	6.006	45	3135	0.311	ppbv	94
16) Acrylonitrile (2-Prope...	6.083	53	1467	0.316	ppbv #	94
17) Iodomethane	6.298	142	6265	0.326	ppbv #	86
18) 1,1-Dichloroethene	6.349	61	4863	0.338	ppbv	99
19) tert-Butyl alcohol	6.605	59	4108m	0.815	ppbv	
20) Methylene chloride	6.436	49	5600	0.510	ppbv	85
21) Allyl chloride	6.544	41	4386	0.319	ppbv #	83
22) 1,1,2-Trichloro-1,2,2-...	6.667	101	7068	0.338	ppbv	95
23) Carbon disulfide	6.728	76	12017	0.348	ppbv	98
24) trans-1,2-Dichloroethe...	7.194	61	5593	0.346	ppbv	93
25) 1,1-Dichloroethane	7.348	63	5963	0.343	ppbv	97
26) MTBE	7.502	73	9544	0.299	ppbv #	93
27) Vinyl acetate	7.466	43	7747	0.276	ppbv #	84
28) 2-Butanone (MEK)	7.722	43	6666	0.328	ppbv	90
29) cis-1,2-Dichloroethene...	7.937	61	4403	0.339	ppbv	97
30) Ethyl acetate	8.075	43	4037	Below Cal	#	79
31) Hexane	8.075	57	7127	0.399	ppbv #	8
32) Diisopropyl ether	8.075	43	4037	Below Cal	#	1
33) Chloroform	8.126	83	6883	0.342	ppbv	98
34) Tetrahydrofuran	8.500	42	3559	0.319	ppbv	88
35) tert-Butyl ethyl ether...	8.495	59	6326	0.306	ppbv	93
36) 1,2-Dichloroethane	8.613	62	4352	0.345	ppbv	98
37) 1,1,1-Trichloroethane	8.777	97	4735	0.277	ppbv #	98
38) Benzene	9.053	78	12563	0.362	ppbv	99
39) Carbon tetrachloride	9.140	117	2659	1.224	ppbv	99
40) Cyclohexane	9.233	56	15216	0.657	ppbv #	46
42) tert-Amyl methyl ether...	9.458	73	5394	0.295	ppbv #	84
43) Dibromomethane	9.504	93	2608	0.346	ppbv	92
44) 1,2-Dichloropropane	9.525	63	4137	0.366	ppbv #	93
45) Bromodichloromethane	9.622	83	4877	0.549	ppbv #	97
46) Trichloroethene	9.647	130	5646	0.337	ppbv	97
48) Isooctane	9.668	57	21118	0.411	ppbv	95
49) Heptane	9.791	57	4746	0.412	ppbv #	77
50) trans-1,3,-Dichloropro...	10.098	75	5201	0.289	ppbv	99
51) cis-1,3-Dichloropropene	10.364	75	4054	0.261	ppbv	99
52) Methyl isobutyl ketone	10.206	43	6203	0.285	ppbv #	95
53) 1,1,2-Trichloroethane	10.467	97	4652	0.336	ppbv	97
54) Toluene	10.610	91	25735	0.489	ppbv	99
55) 2-Hexanone	10.795	43	5334	0.261	ppbv #	94
56) Dibromochloromethane	10.831	129	2998	0.874	ppbv	99
57) Tetrachloroethene	11.163	166	7605	0.326	ppbv	99
58) 1,2-Dibromoethane	10.953	107	6084	0.299	ppbv	99

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL04.D
 Acq On : 5 Jul 2017 11:16 am
 Operator : MJB
 Sample : 1711838-CAL1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

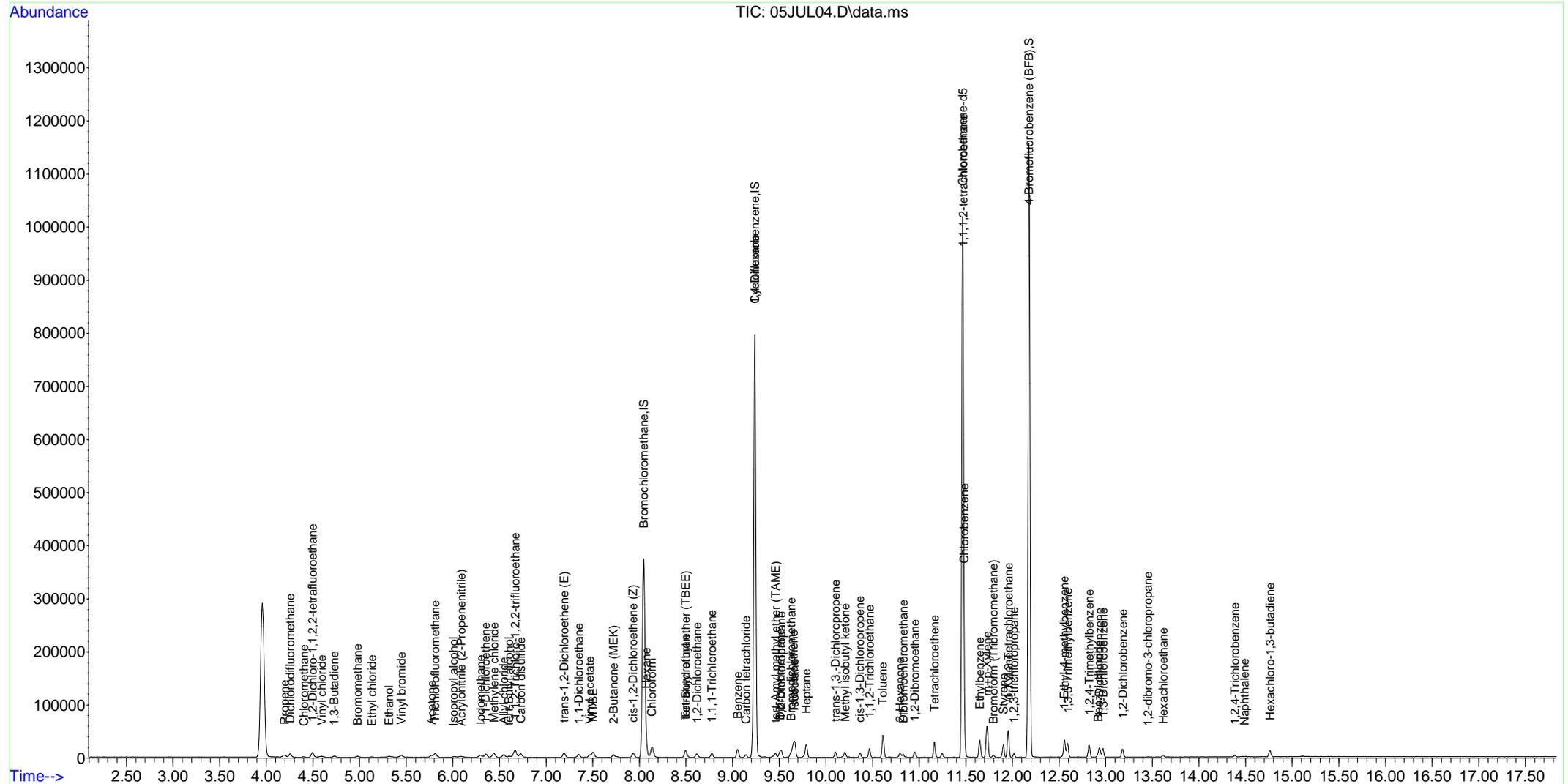
Quant Time: Jul 05 14:51:52 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
59) Chlorobenzene	11.486	112	12161	0.349	ppbv #	60
60) 1,1,1,2-tetrachloroethane	11.476	131	1346	0.707	ppbv #	1
62) Ethylbenzene	11.650	106	6631	0.351	ppbv	100
63) m+p-Xylene	11.727	91	35116	0.834	ppbv	99
64) Bromoform (Tribromomet...	11.798	173	1991	0.992	ppbv #	97
65) Styrene	11.901	104	10412	0.317	ppbv #	93
66) 1,1,2,2-Tetrachloroethane	11.952	83	7921	0.316	ppbv	98
67) o-Xylene	11.957	91	16753	0.397	ppbv	99
68) 1,2,3-trichloropropane	12.014	75	2815	0.311	ppbv	96
70) 1-Ethyl-4-methylbenzene	12.562	105	20945	0.384	ppbv	96
71) 1,3,5-Trimethylbenzene	12.592	105	12226	0.332	ppbv	94
72) 1,2,4-Trimethylbenzene	12.823	105	12045	0.321	ppbv	98
73) Benzyl chloride	12.915	91	3424	0.764	ppbv	94
74) 1,3-Dichlorobenzene	12.971	146	6055	0.367	ppbv	99
75) 1,4-Dichlorobenzene	12.935	146	7271	0.273	ppbv	98
76) 1,2-Dichlorobenzene	13.181	146	6508	0.291	ppbv	99
77) 1,2-dibromo-3-chloropr...	13.453	75	42	0.945	ppbv #	43
78) Hexachloroethane	13.617	117	172	0.885	ppbv #	1
79) 1,2,4-Trichlorobenzene	14.385	180	1436	0.431	ppbv	98
80) Naphthalene	14.492	128	377	0.996	ppbv #	71
81) Hexachloro-1,3-butadiene	14.759	225	3826	0.701	ppbv	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL04.D
 Acq On : 5 Jul 2017 11:16 am
 Operator : MJB
 Sample : 1711838-CAL1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:51:52 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL05.D
 Acq On : 5 Jul 2017 11:45 am
 Operator : MJB
 Sample : 1711838-CAL2
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:52:03 2017

Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M

Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1

QLast Update : Wed Jul 05 14:48:03 2017

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.045	49	151794	10.000	ppbv	0.000
41) 1,4-Difluorobenzene	9.238	114	585940	10.000	ppbv	0.000
61) Chlorobenzene-d5	11.466	82	250791	10.000	ppbv	0.000

System Monitoring Compounds

69) 4-Bromofluorobenzene (...	12.177	95	333775	9.654	ppbv	0.000
Spiked Amount	10.000	Range	70 - 130	Recovery	=	96.540%

Target Compounds

						Qvalue
3) Propene	4.188	41	7304	0.960	ppbv	97
4) Dichlorodifluoromethane	4.250	85	20588	1.004	ppbv	97
5) Chloromethane	4.403	50	3697	0.910	ppbv	100
6) 1,2-Dichloro-1,1,2,2-t...	4.490	85	15367	1.016	ppbv	95
7) Vinyl chloride	4.603	62	5150	0.928	ppbv	100
8) 1,3-Butadiene	4.731	54	4350	0.958	ppbv	96
9) Bromomethane	4.982	94	5821	0.949	ppbv	97
10) Ethyl chloride	5.136	64	2787	0.947	ppbv	96
11) Ethanol	5.315	45	4401	1.902	ppbv	100
12) Vinyl bromide	5.448	106	10799	0.919	ppbv #	93
13) Trichlorofluoromethane	5.812	101	20683	0.919	ppbv	99
14) Acetone	5.760	43	13030	1.006	ppbv	96
15) Isopropyl alcohol	6.011	45	10308	1.042	ppbv	92
16) Acrylonitrile (2-Prope...	6.073	53	4218	0.924	ppbv	99
17) Iodomethane	6.298	142	17025	0.902	ppbv	87
18) 1,1-Dichloroethene	6.354	61	13112	0.927	ppbv	99
20) Methylene chloride	6.442	49	11463	1.063	ppbv	86
21) Allyl chloride	6.544	41	11819	0.874	ppbv	86
22) 1,1,2-Trichloro-1,2,2-...	6.662	101	18857	0.917	ppbv	96
23) Carbon disulfide	6.728	76	31450	0.928	ppbv	99
24) trans-1,2-Dichloroethe...	7.189	61	14832	0.934	ppbv	94
25) 1,1-Dichloroethane	7.348	63	15898	0.930	ppbv	97
26) MTBE	7.491	73	28222	0.900	ppbv	96
27) Vinyl acetate	7.461	43	21906	0.793	ppbv #	87
28) 2-Butanone (MEK)	7.712	43	19042	0.954	ppbv	90
29) cis-1,2-Dichloroethene...	7.932	61	11760	0.921	ppbv	96
31) Hexane	8.075	57	18439	1.050	ppbv #	8
33) Chloroform	8.126	83	18113	0.916	ppbv	98
34) Tetrahydrofuran	8.490	42	10634	0.969	ppbv	89
35) tert-Butyl ethyl ether...	8.490	59	18690	0.920	ppbv	93
36) 1,2-Dichloroethane	8.613	62	11407	0.920	ppbv	100
37) 1,1,1-Trichloroethane	8.777	97	13379	0.796	ppbv #	98
38) Benzene	9.053	78	32456	0.952	ppbv	98
39) Carbon tetrachloride	9.140	117	8352	1.475	ppbv	99
40) Cyclohexane	9.222	56	26234	1.153	ppbv #	65
42) tert-Amyl methyl ether...	9.458	73	16551	0.922	ppbv #	89
43) Dibromomethane	9.504	93	7084	0.958	ppbv	94
44) 1,2-Dichloropropane	9.525	63	11264	1.015	ppbv #	92
45) Bromodichloromethane	9.622	83	15594	0.963	ppbv	98
46) Trichloroethene	9.648	130	15113	0.919	ppbv	97
47) 1,4-Dioxane	9.663	58	2483	0.535	ppbv #	1
48) Isooctane	9.668	57	55811	1.109	ppbv	95
49) Heptane	9.791	57	12970	1.149	ppbv #	74
50) trans-1,3,-Dichloropro...	10.103	75	15337	0.868	ppbv	98
51) cis-1,3-Dichloropropene	10.365	75	12518	0.822	ppbv	97
52) Methyl isobutyl ketone	10.201	43	21267	0.998	ppbv #	96
53) 1,1,2-Trichloroethane	10.467	97	12942	0.953	ppbv	99
54) Toluene	10.610	91	54963	1.066	ppbv	100
55) 2-Hexanone	10.795	43	19209	0.958	ppbv	97
56) Dibromochloromethane	10.831	129	10691	1.133	ppbv	98
57) Tetrachloroethene	11.163	166	20721	0.906	ppbv	98
58) 1,2-Dibromoethane	10.953	107	18020	0.904	ppbv	100
59) Chlorobenzene	11.486	112	32514	0.953	ppbv #	87
60) 1,1,1,2-tetrachloroethane	11.476	131	4877	1.033	ppbv #	1

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL05.D
 Acq On : 5 Jul 2017 11:45 am
 Operator : MJB
 Sample : 1711838-CAL2
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

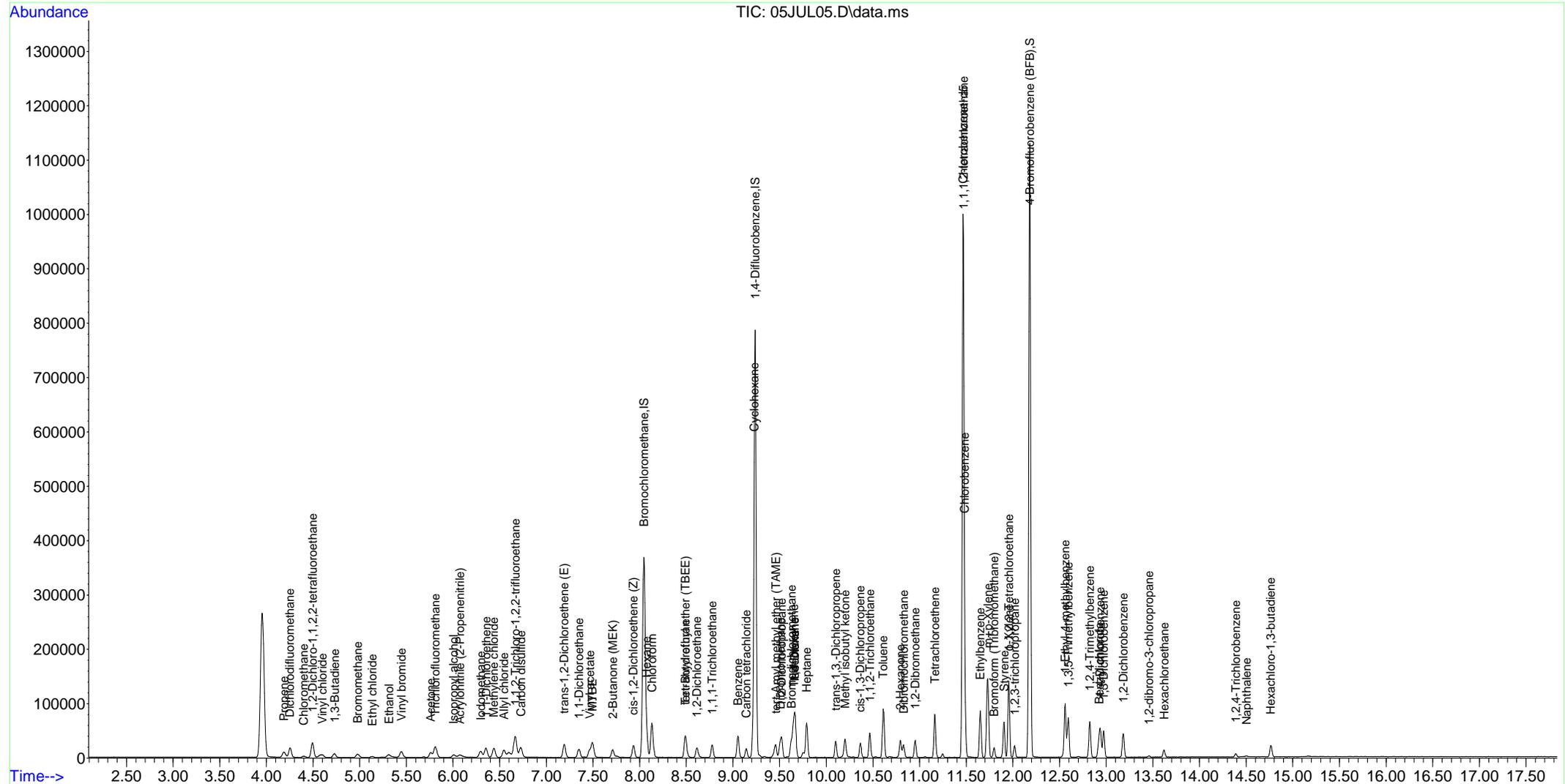
Quant Time: Jul 05 14:52:03 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
62) Ethylbenzene	11.650	106	17416	0.941	ppbv	99
63) m+p-Xylene	11.732	91	86411	2.096	ppbv	99
64) Bromoform (Tribromomet...	11.798	173	8008	1.171	ppbv	98
65) Styrene	11.906	104	29381	0.914	ppbv #	94
66) 1,1,2,2-Tetrachloroethane	11.957	83	24085	0.982	ppbv	99
67) o-Xylene	11.957	91	42837	1.037	ppbv	99
68) 1,2,3-trichloropropane	12.019	75	8113	0.914	ppbv	98
70) 1-Ethyl-4-methylbenzene	12.562	105	57988	1.086	ppbv	95
71) 1,3,5-Trimethylbenzene	12.592	105	35617	0.988	ppbv	94
72) 1,2,4-Trimethylbenzene	12.823	105	33367	0.907	ppbv	100
73) Benzyl chloride	12.920	91	14327	1.010	ppbv	98
74) 1,3-Dichlorobenzene	12.971	146	15226	0.941	ppbv	98
75) 1,4-Dichlorobenzene	12.935	146	21477	0.824	ppbv	98
76) 1,2-Dichlorobenzene	13.181	146	18113	0.826	ppbv	99
77) 1,2-dibromo-3-chloropr...	13.463	75	627	1.218	ppbv	93
78) Hexachloroethane	13.622	117	740	1.112	ppbv #	1
79) 1,2,4-Trichlorobenzene	14.390	180	2522	0.773	ppbv	100
80) Naphthalene	14.503	128	1739	1.337	ppbv #	88
81) Hexachloro-1,3-butadiene	14.769	225	6484	1.212	ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL05.D
 Acq On : 5 Jul 2017 11:45 am
 Operator : MJB
 Sample : 1711838-CAL2
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:52:03 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL06.D
 Acq On : 5 Jul 2017 12:16 pm
 Operator : MJB
 Sample : 1711838-CAL3
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:52:19 2017

Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M

Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1

QLast Update : Wed Jul 05 14:48:03 2017

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.047	49	150854	10.000	ppbv	0.000
41) 1,4-Difluorobenzene	9.236	114	593191	10.000	ppbv	0.000
61) Chlorobenzene-d5	11.468	82	253601	10.000	ppbv	0.000

System Monitoring Compounds

69) 4-Bromofluorobenzene (...	12.180	95	344469	9.853	ppbv	0.000
Spiked Amount	10.000	Range	70 - 130	Recovery	=	98.530%

Target Compounds

						Qvalue
2) 1,1,1,2-Tetrafluoroethane	4.042	69	203	2.268	ppbv	# 43
3) Propene	4.186	41	39223	5.185	ppbv	96
4) Dichlorodifluoromethane	4.252	85	115457	5.663	ppbv	99
5) Chloromethane	4.401	50	22156	5.487	ppbv	100
6) 1,2-Dichloro-1,1,2,2-t...	4.493	85	80474	5.355	ppbv	94
7) Vinyl chloride	4.606	62	29623	5.371	ppbv	99
8) 1,3-Butadiene	4.729	54	23945	5.306	ppbv	98
9) Bromomethane	4.980	94	32383	5.315	ppbv	99
10) Ethyl chloride	5.133	64	15533	5.312	ppbv	99
11) Ethanol	5.282	45	26487	11.518	ppbv	96
12) Vinyl bromide	5.446	106	61338	5.254	ppbv	100
13) Trichlorofluoromethane	5.814	101	117530	5.255	ppbv	99
14) Acetone	5.717	43	76572	5.951	ppbv	95
15) Isopropyl alcohol	5.968	45	70231	7.146	ppbv	92
16) Acrylonitrile (2-Prope...	6.060	53	24107	5.312	ppbv	99
17) Iodomethane	6.296	142	97386	5.190	ppbv	87
18) 1,1-Dichloroethene	6.352	61	75243	5.351	ppbv	97
19) tert-Butyl alcohol	6.352	59	2340	0.475	ppbv	# 57
20) Methylene chloride	6.434	49	53302	4.973	ppbv	89
21) Allyl chloride	6.547	41	90705	6.750	ppbv	# 76
22) 1,1,2-Trichloro-1,2,2-...	6.670	101	107099	5.241	ppbv	94
23) Carbon disulfide	6.726	76	178885	5.309	ppbv	99
24) trans-1,2-Dichloroethe...	7.192	61	84159	5.330	ppbv	95
25) 1,1-Dichloroethane	7.351	63	90038	5.299	ppbv	97
26) MTBE	7.448	73	169576	5.444	ppbv	96
27) Vinyl acetate	7.448	43	147405	5.369	ppbv	# 91
28) 2-Butanone (MEK)	7.668	43	107391	5.415	ppbv	95
29) cis-1,2-Dichloroethene...	7.935	61	67950	5.356	ppbv	96
30) Ethyl acetate	8.099	43	210344	5.998	ppbv	# 95
31) Hexane	8.073	57	100788	5.775	ppbv	# 73
32) Diisopropyl ether	8.099	43	210344	5.998	ppbv	# 84
33) Chloroform	8.129	83	103167	5.247	ppbv	99
34) Tetrahydrofuran	8.462	42	61897	5.676	ppbv	94
35) tert-Butyl ethyl ether...	8.462	59	111246	5.507	ppbv	93
36) 1,2-Dichloroethane	8.611	62	65015	5.277	ppbv	99
37) 1,1,1-Trichloroethane	8.780	97	85157	5.095	ppbv	98
38) Benzene	9.056	78	180368	5.322	ppbv	99
39) Carbon tetrachloride	9.143	117	69803	4.174	ppbv	99
40) Cyclohexane	9.220	56	105958	4.687	ppbv	86
42) tert-Amyl methyl ether...	9.435	73	101528	5.588	ppbv	# 92
43) Dibromomethane	9.502	93	40352	5.389	ppbv	92
44) 1,2-Dichloropropane	9.522	63	62536	5.569	ppbv	# 94
45) Bromodichloromethane	9.625	83	117447	4.812	ppbv	97
46) Trichloroethene	9.645	130	89478	5.376	ppbv	96
47) 1,4-Dioxane	9.666	58	13845	2.945	ppbv	# 1
48) Isooctane	9.666	57	311115	6.104	ppbv	92
49) Heptane	9.789	57	62622	5.482	ppbv	89
50) trans-1,3,-Dichloropro...	10.101	75	97886	5.475	ppbv	99
51) cis-1,3-Dichloropropene	10.367	75	84753	5.494	ppbv	97
52) Methyl isobutyl ketone	10.183	43	128707	5.966	ppbv	95
53) 1,1,2-Trichloroethane	10.470	97	74648	5.430	ppbv	98
54) Toluene	10.613	91	275968	5.288	ppbv	99
55) 2-Hexanone	10.782	43	120369	5.929	ppbv	98
56) Dibromochloromethane	10.828	129	108015	4.344	ppbv	99

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL06.D
 Acq On : 5 Jul 2017 12:16 pm
 Operator : MJB
 Sample : 1711838-CAL3
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

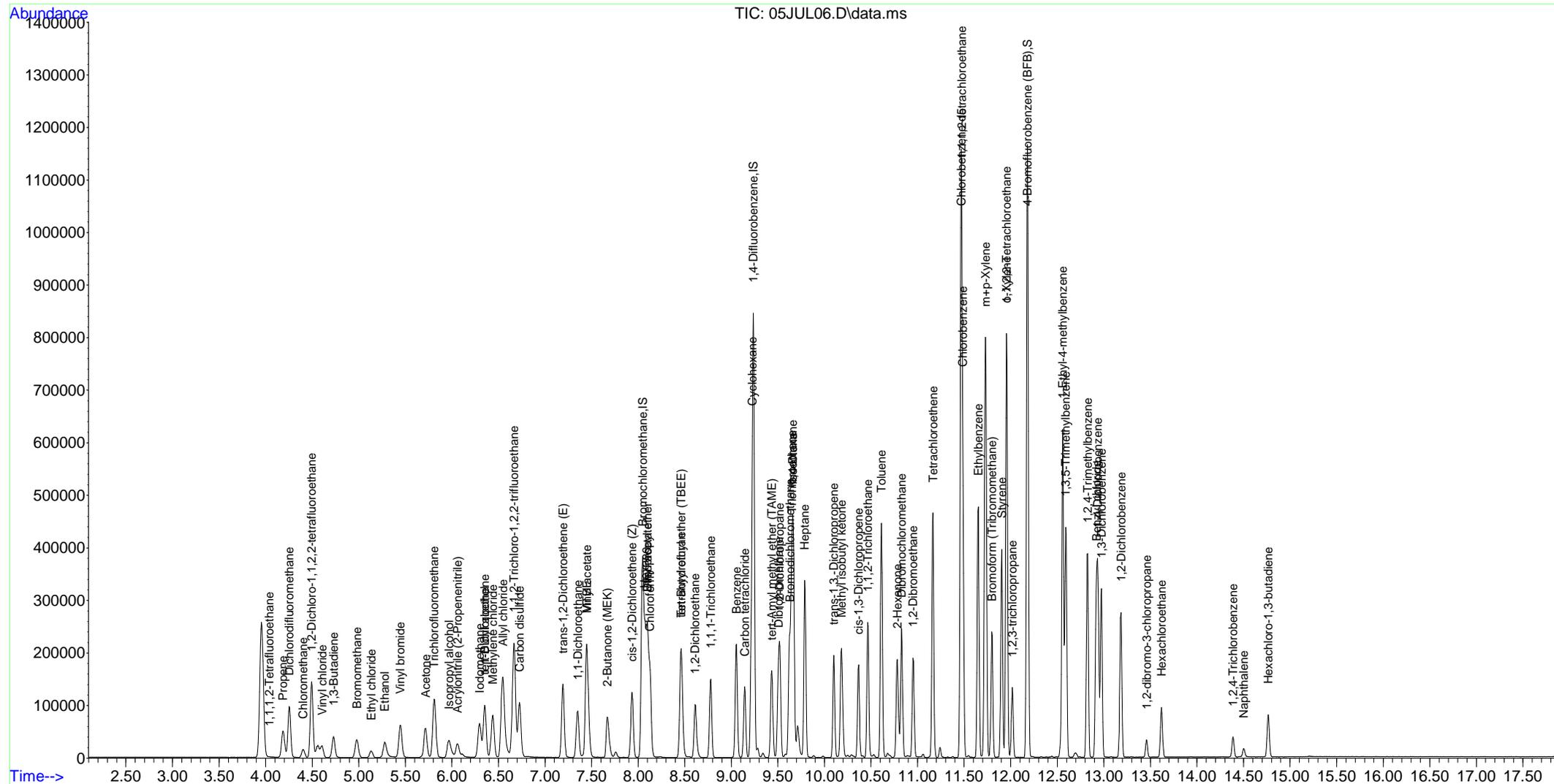
Quant Time: Jul 05 14:52:19 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Tetrachloroethene	11.166	166	124463	5.376	ppbv	98
58) 1,2-Dibromoethane	10.951	107	111354	5.516	ppbv	100
59) Chlorobenzene	11.489	112	190686	5.518	ppbv	97
60) 1,1,1,2-tetrachloroethane	11.479	131	44238	4.585	ppbv #	1
62) Ethylbenzene	11.653	106	100909	5.394	ppbv	95
63) m+p-Xylene	11.730	91	476081	11.418	ppbv	98
64) Bromoform (Tribromomet...	11.801	173	109376	4.129	ppbv	98
65) Styrene	11.904	104	177429	5.457	ppbv #	96
66) 1,1,2,2-Tetrachloroethane	11.955	83	152658	6.155	ppbv	100
67) o-Xylene	11.960	91	239461	5.734	ppbv	96
68) 1,2,3-trichloropropane	12.016	75	49029	5.461	ppbv	98
70) 1-Ethyl-4-methylbenzene	12.559	105	374490	6.939	ppbv	94
71) 1,3,5-Trimethylbenzene	12.590	105	193140	5.300	ppbv	95
72) 1,2,4-Trimethylbenzene	12.826	105	201710	5.421	ppbv	98
73) Benzyl chloride	12.918	91	174523	4.549	ppbv	95
74) 1,3-Dichlorobenzene	12.974	146	117245	7.166	ppbv	98
75) 1,4-Dichlorobenzene	12.938	146	136496	5.180	ppbv	99
76) 1,2-Dichlorobenzene	13.184	146	117058	5.280	ppbv	99
77) 1,2-dibromo-3-chloropr...	13.456	75	7629	4.437	ppbv	92
78) Hexachloroethane	13.619	117	10082	4.379	ppbv #	33
79) 1,2,4-Trichlorobenzene	14.388	180	14241	4.317	ppbv	99
80) Naphthalene	14.505	128	14603	4.494	ppbv	100
81) Hexachloro-1,3-butadiene	14.767	225	24298	4.492	ppbv	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL06.D
 Acq On : 5 Jul 2017 12:16 pm
 Operator : MJB
 Sample : 1711838-CAL3
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:52:19 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL07.D
 Acq On : 5 Jul 2017 12:54 pm
 Operator : MJB
 Sample : 1711838-CAL4
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:52:33 2017

Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M

Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1

QLast Update : Wed Jul 05 14:48:03 2017

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.046	49	148421	10.000	ppbv	0.000
41) 1,4-Difluorobenzene	9.239	114	599974	10.000	ppbv	0.000
61) Chlorobenzene-d5	11.467	82	256725	10.000	ppbv	0.000

System Monitoring Compounds

69) 4-Bromofluorobenzene (... 12.184 95 356909 10.085 ppbv 0.000
 Spiked Amount 10.000 Range 70 - 130 Recovery = 100.850%

Target Compounds

						Qvalue
2) 1,1,1,2-Tetrafluoroethane	4.046	69	663	7.528	ppbv	# 73
3) Propene	4.189	41	116205	15.615	ppbv	96
4) Dichlorodifluoromethane	4.256	85	329952	16.448	ppbv	100
5) Chloromethane	4.404	50	66708	16.791	ppbv	100
6) 1,2-Dichloro-1,1,2,2-t...	4.491	85	242223	16.381	ppbv	93
7) Vinyl chloride	4.604	62	91735	16.905	ppbv	99
8) 1,3-Butadiene	4.727	54	74312	16.737	ppbv	99
9) Bromomethane	4.983	94	98529	16.436	ppbv	100
10) Ethyl chloride	5.132	64	47014	16.341	ppbv	100
11) Ethanol	5.254	45	80323	35.501	ppbv	96
12) Vinyl bromide	5.449	106	188217	16.385	ppbv	100
13) Trichlorofluoromethane	5.813	101	361693	16.438	ppbv	99
14) Acetone	5.685	43	227731	17.988	ppbv	94
15) Isopropyl alcohol	5.925	45	227701	23.550	ppbv	# 87
16) Acrylonitrile (2-Prope...	6.053	53	73138	16.381	ppbv	98
17) Iodomethane	6.299	142	303833	16.457	ppbv	87
18) 1,1-Dichloroethene	6.356	61	225622	16.310	ppbv	99
19) tert-Butyl alcohol	6.356	59	6981	1.442	ppbv	# 55
20) Methylene chloride	6.437	49	155818	14.776	ppbv	90
21) Allyl chloride	6.545	41	207879	15.723	ppbv	94
22) 1,1,2-Trichloro-1,2,2-...	6.668	101	329782	16.401	ppbv	91
23) Carbon disulfide	6.729	76	539318	16.270	ppbv	98
24) trans-1,2-Dichloroethe...	7.190	61	253126	16.294	ppbv	97
25) 1,1-Dichloroethane	7.349	63	272598	16.308	ppbv	98
26) MTBE	7.421	73	511416	16.689	ppbv	93
27) Vinyl acetate	7.436	43	470109	17.404	ppbv	93
28) 2-Butanone (MEK)	7.646	43	319552	16.377	ppbv	97
29) cis-1,2-Dichloroethene...	7.933	61	203897	16.336	ppbv	99
30) Ethyl acetate	8.081	43	549546	16.169	ppbv	# 92
31) Hexane	8.076	57	271521	15.812	ppbv	# 70
32) Diisopropyl ether	8.081	43	549546	16.169	ppbv	# 81
33) Chloroform	8.133	83	316573	16.365	ppbv	99
34) Tetrahydrofuran	8.435	42	176937	16.490	ppbv	99
35) tert-Butyl ethyl ether...	8.435	59	332920	16.752	ppbv	96
36) 1,2-Dichloroethane	8.614	62	198230	16.353	ppbv	99
37) 1,1,1-Trichloroethane	8.778	97	285262	17.348	ppbv	100
38) Benzene	9.054	78	538185	16.141	ppbv	99
39) Carbon tetrachloride	9.147	117	284091	13.782	ppbv	99
40) Cyclohexane	9.218	56	291874	13.122	ppbv	92
42) tert-Amyl methyl ether...	9.413	73	310844	16.914	ppbv	# 94
43) Dibromomethane	9.505	93	124700	16.465	ppbv	# 88
44) 1,2-Dichloropropane	9.521	63	184577	16.250	ppbv	95
45) Bromodichloromethane	9.623	83	397319	15.239	ppbv	99
46) Trichloroethene	9.649	130	287410	17.073	ppbv	93
47) 1,4-Dioxane	9.679	58	118659	24.954	ppbv	# 85
48) Isooctane	9.669	57	819846	15.904	ppbv	93
49) Heptane	9.792	57	177558	15.368	ppbv	93
50) trans-1,3,-Dichloropro...	10.099	75	314264	17.379	ppbv	98
51) cis-1,3-Dichloropropene	10.366	75	277592	17.792	ppbv	96
52) Methyl isobutyl ketone	10.161	43	370005	16.957	ppbv	95
53) 1,1,2-Trichloroethane	10.468	97	231831	16.674	ppbv	98
54) Toluene	10.611	91	796885	15.096	ppbv	98
55) 2-Hexanone	10.765	43	354521	17.265	ppbv	95
56) Dibromochloromethane	10.832	129	433295	14.927	ppbv	99

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL07.D
 Acq On : 5 Jul 2017 12:54 pm
 Operator : MJB
 Sample : 1711838-CAL4
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

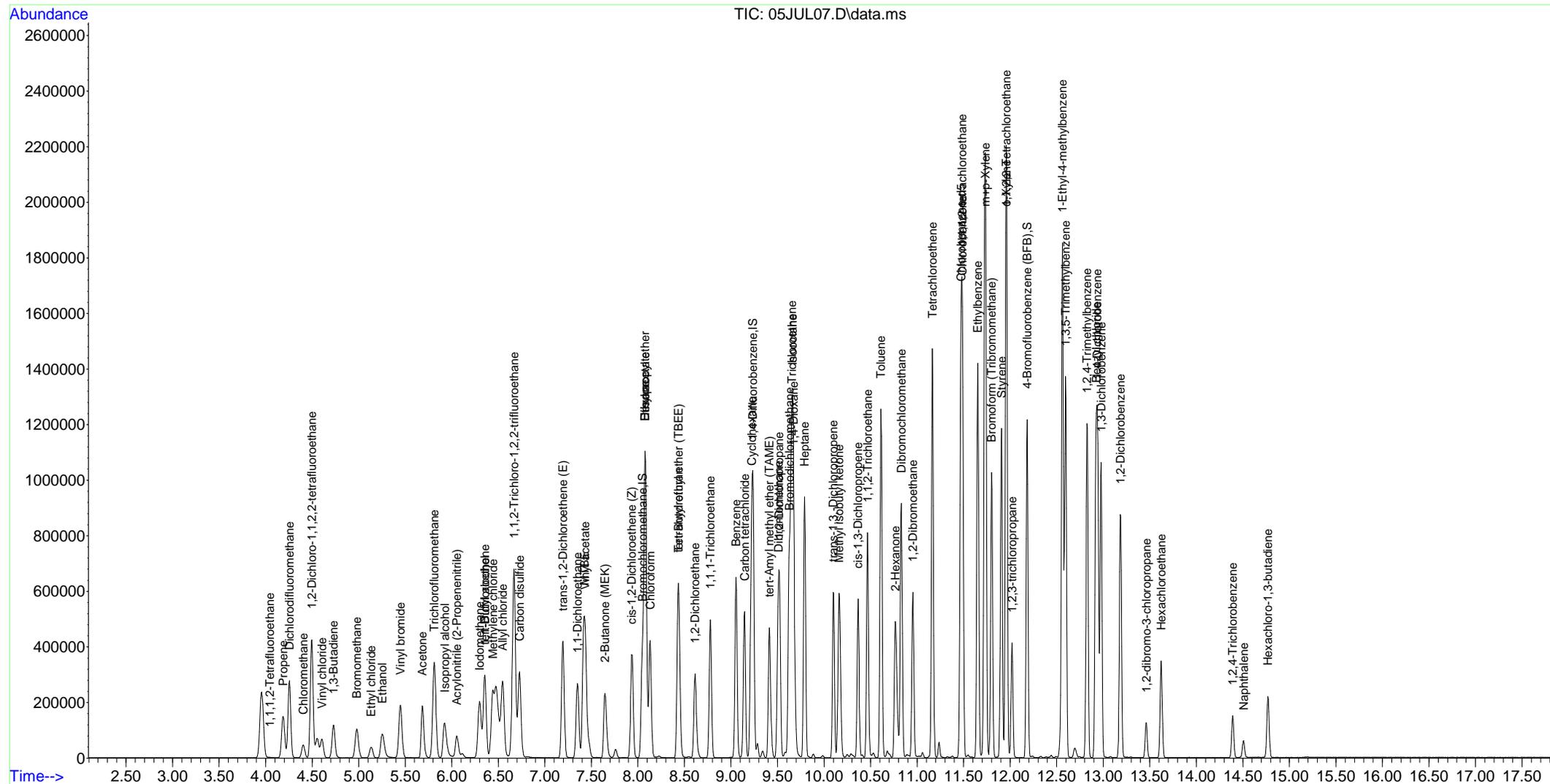
Quant Time: Jul 05 14:52:33 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Tetrachloroethene	11.164	166	398500	17.019	ppbv	98
58) 1,2-Dibromoethane	10.954	107	350414	17.162	ppbv	100
59) Chlorobenzene	11.492	112	585158	16.743	ppbv	93
60) 1,1,1,2-tetrachloroethane	11.477	131	162359	15.096	ppbv #	59
62) Ethylbenzene	11.651	106	314293	16.597	ppbv	89
63) m+p-Xylene	11.733	91	1337130	31.679	ppbv	95
64) Bromoform (Tribromomet...	11.800	173	484849	14.921	ppbv #	97
65) Styrene	11.907	104	558768	16.977	ppbv	98
66) 1,1,2,2-Tetrachloroethane	11.958	83	429338	17.098	ppbv	100
67) o-Xylene	11.958	91	681805	16.127	ppbv	93
68) 1,2,3-trichloropropane	12.020	75	152687	16.800	ppbv	99
70) 1-Ethyl-4-methylbenzene	12.563	105	1058994	19.383	ppbv	92
71) 1,3,5-Trimethylbenzene	12.593	105	590392	16.004	ppbv	91
72) 1,2,4-Trimethylbenzene	12.824	105	638016	16.937	ppbv	96
73) Benzyl chloride	12.921	91	660140	15.109	ppbv #	91
74) 1,3-Dichlorobenzene	12.977	146	314796	19.007	ppbv	99
75) 1,4-Dichlorobenzene	12.942	146	462208	17.327	ppbv	100
76) 1,2-Dichlorobenzene	13.187	146	388866	17.328	ppbv	99
77) 1,2-dibromo-3-chloropr...	13.459	75	29945	14.538	ppbv	89
78) Hexachloroethane	13.623	117	54539	15.037	ppbv #	79
79) 1,2,4-Trichlorobenzene	14.391	180	54380	16.284	ppbv	99
80) Naphthalene	14.509	128	56333	14.583	ppbv	99
81) Hexachloro-1,3-butadiene	14.775	225	67526	12.330	ppbv	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
Data File : 05JUL07.D
Acq On : 5 Jul 2017 12:54 pm
Operator : MJB
Sample : 1711838-CAL4
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:52:33 2017
Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
QLast Update : Wed Jul 05 14:48:03 2017
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL08.D
 Acq On : 5 Jul 2017 1:35 pm
 Operator : MJB
 Sample : 1711838-CAL5
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:52:49 2017

Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M

Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1

QLast Update : Wed Jul 05 14:48:03 2017

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.048	49	144416	10.000	ppbv	0.000
41) 1,4-Difluorobenzene	9.236	114	603061	10.000	ppbv	0.000
61) Chlorobenzene-d5	11.469	82	256616	10.000	ppbv	0.000

System Monitoring Compounds

69) 4-Bromofluorobenzene (...	12.186	95	363185	10.266	ppbv	0.000
Spiked Amount	10.000	Range	70 - 130	Recovery	=	102.660%

Target Compounds

						Qvalue
2) 1,1,1,2-Tetrafluoroethane	4.038	69	758	8.846	ppbv	85
3) Propene	4.186	41	151888	20.975	ppbv	96
4) Dichlorodifluoromethane	4.253	85	408057	20.906	ppbv	99
5) Chloromethane	4.401	50	87218	22.563	ppbv	100
6) 1,2-Dichloro-1,1,2,2-t...	4.494	85	303716	21.110	ppbv	94
7) Vinyl chloride	4.601	62	117803	22.311	ppbv	99
8) 1,3-Butadiene	4.729	54	94806	21.946	ppbv	98
9) Bromomethane	4.980	94	130621	22.394	ppbv	100
10) Ethyl chloride	5.134	64	62661	22.384	ppbv	100
11) Ethanol	5.246	45	102178	46.413	ppbv	97
12) Vinyl bromide	5.446	106	252570	22.597	ppbv	100
13) Trichlorofluoromethane	5.810	101	484497	22.630	ppbv	99
14) Acetone	5.677	43	300422	24.388	ppbv	94
15) Isopropyl alcohol	5.907	45	303575	32.267	ppbv #	85
16) Acrylonitrile (2-Prope...	6.051	53	97794	22.511	ppbv	98
17) Iodomethane	6.296	142	409892	22.818	ppbv	87
18) 1,1-Dichloroethene	6.353	61	300142	22.298	ppbv	100
19) tert-Butyl alcohol	6.353	59	9574	2.032	ppbv #	55
20) Methylene chloride	6.440	49	199881	19.480	ppbv	93
21) Allyl chloride	6.547	41	267419	20.787	ppbv	97
22) 1,1,2-Trichloro-1,2,2-...	6.665	101	440231	22.501	ppbv	89
23) Carbon disulfide	6.727	76	713281	22.115	ppbv	98
24) trans-1,2-Dichloroethe...	7.193	61	333382	22.055	ppbv	99
25) 1,1-Dichloroethane	7.351	63	361528	22.227	ppbv	98
26) MTBE	7.413	73	679717	22.796	ppbv	93
27) Vinyl acetate	7.438	43	634079	24.126	ppbv	94
28) 2-Butanone (MEK)	7.638	43	420469	22.146	ppbv	97
29) cis-1,2-Dichloroethene...	7.935	61	270635	22.284	ppbv	99
30) Ethyl acetate	8.073	43	670818	20.322	ppbv #	91
31) Hexane	8.073	57	334167	20.000	ppbv #	69
32) Diisopropyl ether	8.073	43	670818	20.322	ppbv #	82
33) Chloroform	8.130	83	422610	22.452	ppbv	99
34) Tetrahydrofuran	8.427	42	228420	21.879	ppbv	99
35) tert-Butyl ethyl ether...	8.427	59	437361	22.617	ppbv	96
36) 1,2-Dichloroethane	8.611	62	263105	22.307	ppbv	99
37) 1,1,1-Trichloroethane	8.780	97	390388	24.399	ppbv	100
38) Benzene	9.057	78	708485	21.838	ppbv	100
39) Carbon tetrachloride	9.144	117	410421	19.925	ppbv	99
40) Cyclohexane	9.221	56	374664	17.311	ppbv	94
42) tert-Amyl methyl ether...	9.405	73	416759	22.561	ppbv #	94
43) Dibromomethane	9.502	93	166599	21.885	ppbv #	87
44) 1,2-Dichloropropane	9.523	63	239328	20.963	ppbv	95
45) Bromodichloromethane	9.625	83	533275	20.226	ppbv	99
46) Trichloroethene	9.646	130	380171	22.467	ppbv	92
47) 1,4-Dioxane	9.676	58	143582	30.041	ppbv #	83
48) Isooctane	9.666	57	983293	18.977	ppbv	94
49) Heptane	9.789	57	227178	19.562	ppbv	94
50) trans-1,3,-Dichloropro...	10.102	75	420539	23.137	ppbv	97
51) cis-1,3-Dichloropropene	10.368	75	373363	23.808	ppbv	96
52) Methyl isobutyl ketone	10.153	43	475347	21.673	ppbv	95
53) 1,1,2-Trichloroethane	10.470	97	307237	21.985	ppbv	98
54) Toluene	10.614	91	1027905	19.373	ppbv	98
55) 2-Hexanone	10.762	43	460553	22.314	ppbv	94
56) Dibromochloromethane	10.829	129	601681	20.325	ppbv	99

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL08.D
 Acq On : 5 Jul 2017 1:35 pm
 Operator : MJB
 Sample : 1711838-CAL5
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

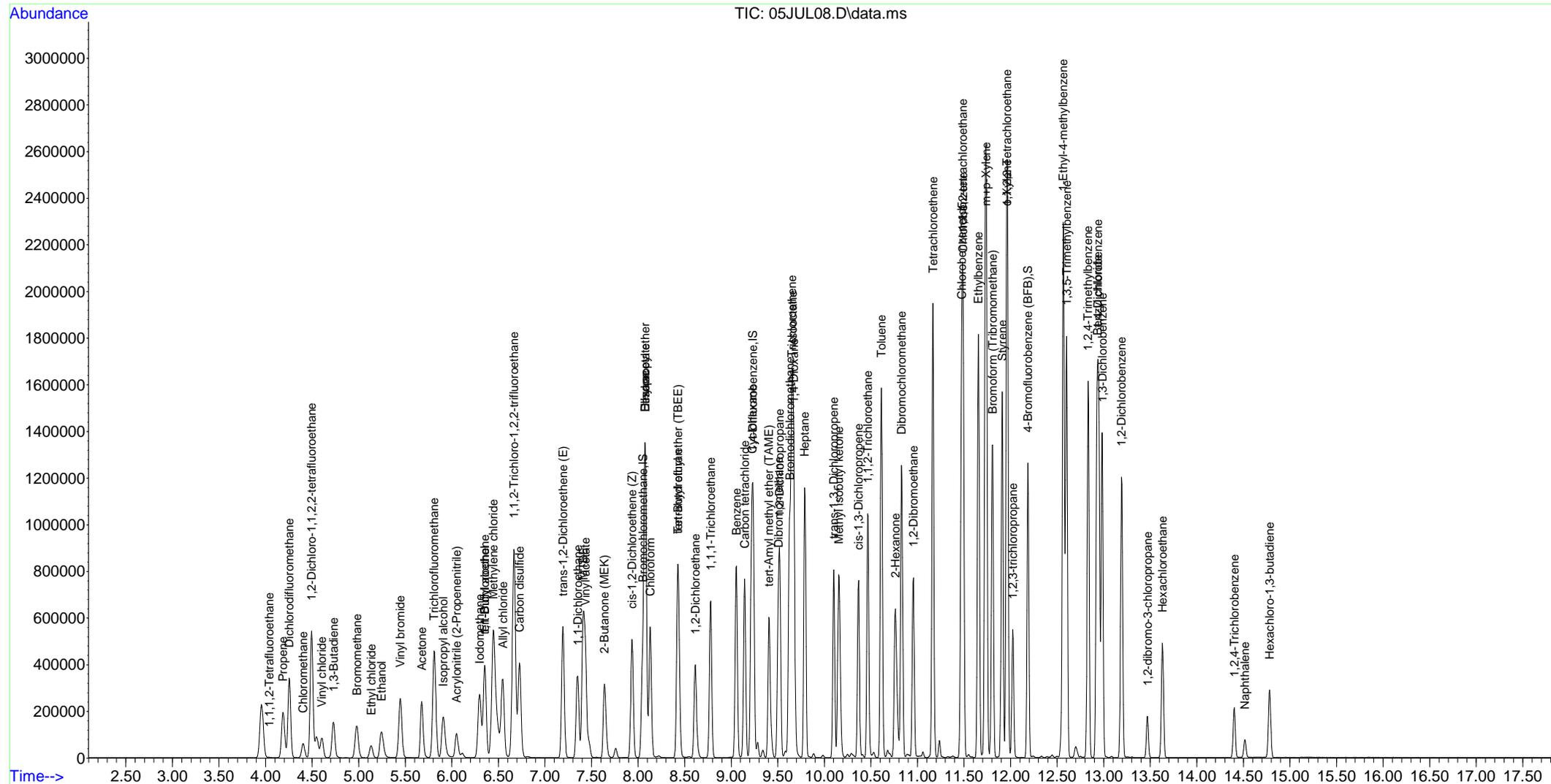
Quant Time: Jul 05 14:52:49 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Tetrachloroethene	11.167	166	531911	22.600	ppbv	97
58) 1,2-Dibromoethane	10.957	107	467682	22.788	ppbv	99
59) Chlorobenzene	11.495	112	765401	21.788	ppbv	92
60) 1,1,1,2-tetrachloroethane	11.479	131	221708	20.298	ppbv	94
62) Ethylbenzene	11.653	106	415784	21.966	ppbv	86
63) m+p-Xylene	11.735	91	1675559	39.714	ppbv	95
64) Bromoform (Tribromomet...	11.807	173	674879	20.411	ppbv #	96
65) Styrene	11.909	104	739776	22.486	ppbv	98
66) 1,1,2,2-Tetrachloroethane	11.961	83	527090	21.000	ppbv	99
67) o-Xylene	11.966	91	849437	20.101	ppbv	93
68) 1,2,3-trichloropropane	12.022	75	205472	22.618	ppbv	99
70) 1-Ethyl-4-methylbenzene	12.565	105	1272377	23.299	ppbv #	91
71) 1,3,5-Trimethylbenzene	12.601	105	841368	22.817	ppbv	98
72) 1,2,4-Trimethylbenzene	12.831	105	847875	22.518	ppbv	95
73) Benzyl chloride	12.928	91	895543	20.259	ppbv #	90
74) 1,3-Dichlorobenzene	12.985	146	313178	18.918	ppbv	99
75) 1,4-Dichlorobenzene	12.944	146	633889	23.773	ppbv	99
76) 1,2-Dichlorobenzene	13.195	146	531821	23.708	ppbv	99
77) 1,2-dibromo-3-chloropr...	13.471	75	41832	19.949	ppbv	87
78) Hexachloroethane	13.630	117	83750	20.255	ppbv #	86
79) 1,2,4-Trichlorobenzene	14.403	180	78140	23.409	ppbv	99
80) Naphthalene	14.516	128	73714	18.811	ppbv	99
81) Hexachloro-1,3-butadiene	14.782	225	89122	16.281	ppbv	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL08.D
 Acq On : 5 Jul 2017 1:35 pm
 Operator : MJB
 Sample : 1711838-CAL5
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:52:49 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL09.D
 Acq On : 5 Jul 2017 2:19 pm
 Operator : MJB
 Sample : 1711838-CAL6
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:53:04 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.045	49	141415	10.000	ppbv	0.000
41) 1,4-Difluorobenzene	9.238	114	605429	10.000	ppbv	0.000
61) Chlorobenzene-d5	11.466	82	256168	10.000	ppbv	0.000

System Monitoring Compounds

69) 4-Bromofluorobenzene (...	12.183	95	372225	10.540	ppbv	0.000
Spiked Amount	10.000	Range	70 - 130	Recovery	=	105.400%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,1,1,2-Tetrafluoroethane	4.045	69	823	9.808	ppbv	84
3) Propene	4.189	41	187607	26.458	ppbv	96
4) Dichlorodifluoromethane	4.255	85	464615	24.309	ppbv	100
5) Chloromethane	4.404	50	105660	27.914	ppbv	99
6) 1,2-Dichloro-1,1,2,2-t...	4.496	85	382172	27.126	ppbv	93
7) Vinyl chloride	4.604	62	146982	28.428	ppbv	100
8) 1,3-Butadiene	4.727	54	117745	27.834	ppbv	99
9) Bromomethane	4.977	94	160239	28.055	ppbv	100
10) Ethyl chloride	5.136	64	76694	27.978	ppbv	100
11) Ethanol	5.244	45	124317	57.667	ppbv	96
12) Vinyl bromide	5.449	106	316158	28.887	ppbv	100
13) Trichlorofluoromethane	5.812	101	604192	28.819	ppbv	98
14) Acetone	5.674	43	370313	30.699	ppbv	93
15) Isopropyl alcohol	5.904	45	364672	39.584	ppbv #	86
16) Acrylonitrile (2-Prope...	6.053	53	122676	28.838	ppbv	99
17) Iodomethane	6.299	142	514525	29.251	ppbv	87
18) 1,1-Dichloroethene	6.355	61	371754	28.205	ppbv	99
19) tert-Butyl alcohol	6.355	59	11893	2.578	ppbv #	1
20) Methylene chloride	6.437	49	242131	24.099	ppbv	95
21) Allyl chloride	6.550	41	320428	25.436	ppbv	100
22) 1,1,2-Trichloro-1,2,2-...	6.668	101	546786	28.541	ppbv	87
23) Carbon disulfide	6.729	76	886053	28.054	ppbv	98
24) trans-1,2-Dichloroethe...	7.195	61	413117	27.910	ppbv	99
25) 1,1-Dichloroethane	7.349	63	448233	28.143	ppbv	98
26) MTBE	7.410	73	836544	28.651	ppbv #	93
27) Vinyl acetate	7.436	43	782519	30.406	ppbv	95
28) 2-Butanone (MEK)	7.635	43	513883	27.641	ppbv	98
29) cis-1,2-Dichloroethene...	7.932	61	334917	28.162	ppbv	100
30) Ethyl acetate	8.076	43	771281	23.886	ppbv #	91
31) Hexane	8.076	57	386011	23.593	ppbv #	69
32) Diisopropyl ether	8.076	43	771281	23.886	ppbv #	82
33) Chloroform	8.132	83	524564	28.460	ppbv	99
34) Tetrahydrofuran	8.424	42	272256	26.631	ppbv	97
35) tert-Butyl ethyl ether...	8.429	59	533443	28.172	ppbv	97
36) 1,2-Dichloroethane	8.614	62	326090	28.234	ppbv	99
37) 1,1,1-Trichloroethane	8.777	97	492198	31.415	ppbv	99
38) Benzene	9.054	78	868556	27.340	ppbv	100
39) Carbon tetrachloride	9.146	117	530187	25.931	ppbv	99
40) Cyclohexane	9.218	56	452855	21.368	ppbv	96
42) tert-Amyl methyl ether...	9.402	73	517686	27.915	ppbv #	95
43) Dibromomethane	9.505	93	206915	27.075	ppbv #	85
44) 1,2-Dichloropropane	9.525	63	289507	25.259	ppbv	96
45) Bromodichloromethane	9.623	83	656664	24.726	ppbv	99
46) Trichloroethene	9.648	130	455229	26.798	ppbv	91
47) 1,4-Dioxane	9.669	58	159349	33.209	ppbv #	81
48) Isooctane	9.669	57	1095881	21.067	ppbv	95
49) Heptane	9.792	57	271235	23.264	ppbv	94
50) trans-1,3,-Dichloropro...	10.104	75	522978	28.661	ppbv	97
51) cis-1,3-Dichloropropene	10.365	75	466291	29.617	ppbv	95
52) Methyl isobutyl ketone	10.150	43	568940	25.839	ppbv	95
53) 1,1,2-Trichloroethane	10.468	97	379425	27.044	ppbv	98
54) Toluene	10.611	91	1233556	23.157	ppbv	97
55) 2-Hexanone	10.754	43	559756	27.015	ppbv	93
56) Dibromochloromethane	10.831	129	746185	24.926	ppbv	99

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL09.D
 Acq On : 5 Jul 2017 2:19 pm
 Operator : MJB
 Sample : 1711838-CAL6
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

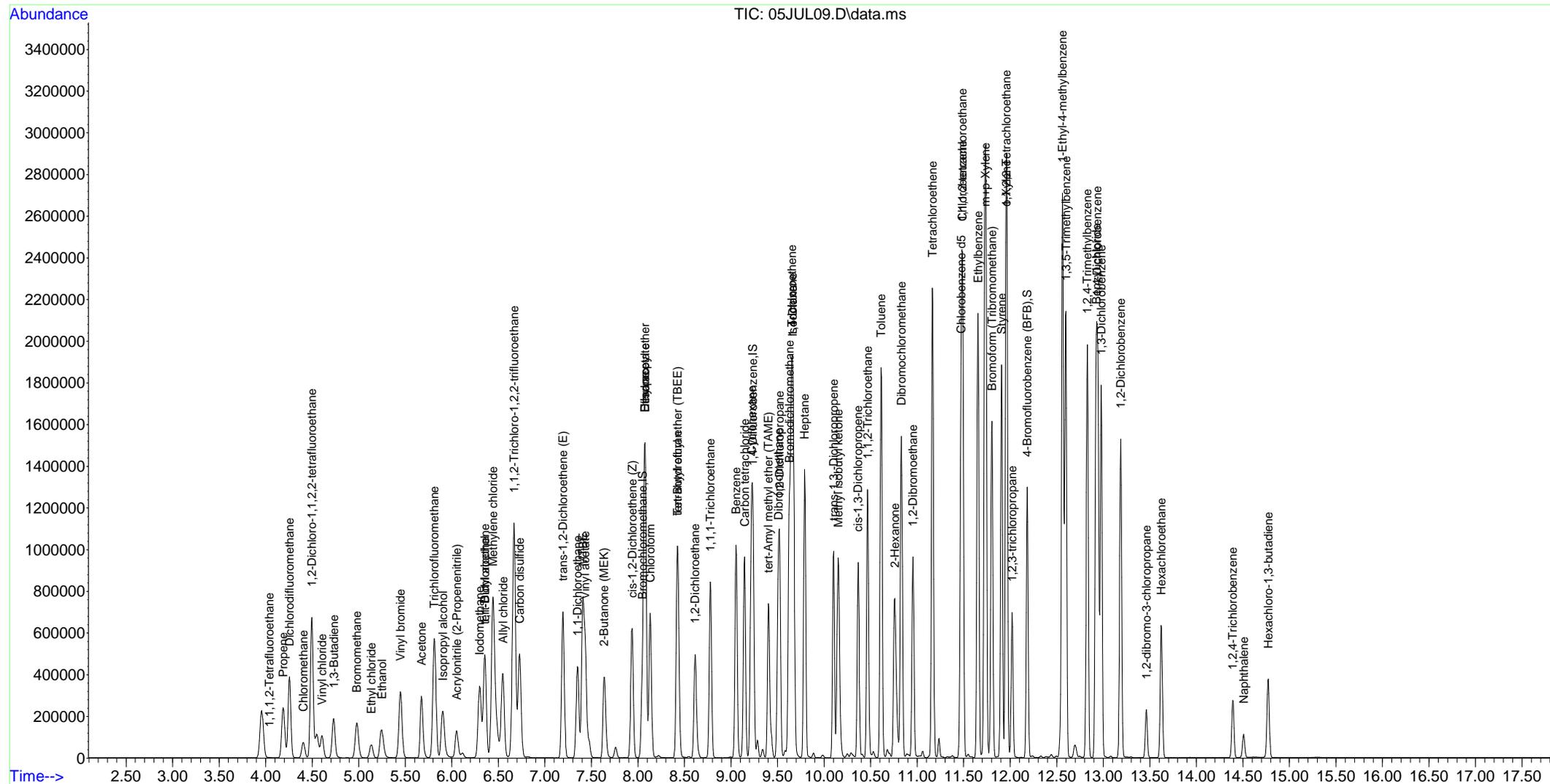
Quant Time: Jul 05 14:53:04 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Tetrachloroethene	11.164	166	652034	27.596	ppbv	98
58) 1,2-Dibromoethane	10.954	107	573883	27.853	ppbv	99
59) Chlorobenzene	11.492	112	920420	26.098	ppbv	92
60) 1,1,1,2-tetrachloroethane	11.482	131	273312	24.791	ppbv	88
62) Ethylbenzene	11.656	106	506539	26.807	ppbv	84
63) m+p-Xylene	11.733	91	1951733	46.341	ppbv	95
64) Bromoform (Tribromomet...	11.804	173	828362	24.882	ppbv #	96
65) Styrene	11.907	104	906427	27.599	ppbv	98
66) 1,1,2,2-Tetrachloroethane	11.958	83	604027	24.108	ppbv	99
67) o-Xylene	11.963	91	992252	23.522	ppbv	93
68) 1,2,3-trichloropropane	12.019	75	255220	28.143	ppbv	99
70) 1-Ethyl-4-methylbenzene	12.562	105	1566307	28.731	ppbv #	90
71) 1,3,5-Trimethylbenzene	12.598	105	992770	26.970	ppbv	90
72) 1,2,4-Trimethylbenzene	12.828	105	1045648	27.819	ppbv	94
73) Benzyl chloride	12.921	91	1102281	24.819	ppbv #	89
74) 1,3-Dichlorobenzene	12.977	146	432710	26.184	ppbv	98
75) 1,4-Dichlorobenzene	12.941	146	813081	30.546	ppbv	98
76) 1,2-Dichlorobenzene	13.187	146	669620	29.904	ppbv	99
77) 1,2-dibromo-3-chloropr...	13.464	75	53754	25.413	ppbv	86
78) Hexachloroethane	13.622	117	113466	24.859	ppbv	89
79) 1,2,4-Trichlorobenzene	14.396	180	103688	31.117	ppbv	99
80) Naphthalene	14.508	128	104288	26.282	ppbv	99
81) Hexachloro-1,3-butadiene	14.775	225	116391	21.299	ppbv	99

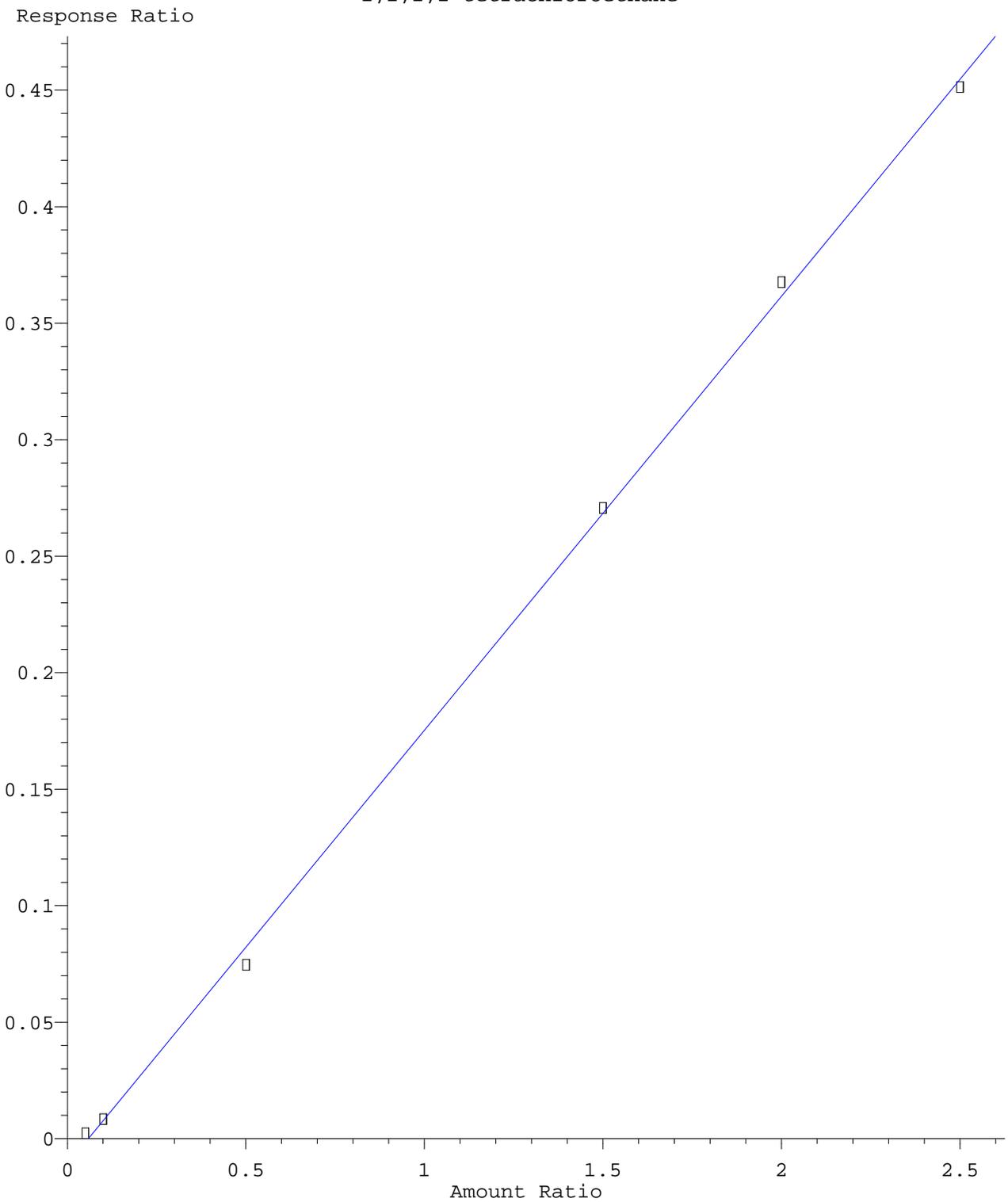
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL09.D
 Acq On : 5 Jul 2017 2:19 pm
 Operator : MJB
 Sample : 1711838-CAL6
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 14:53:04 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration



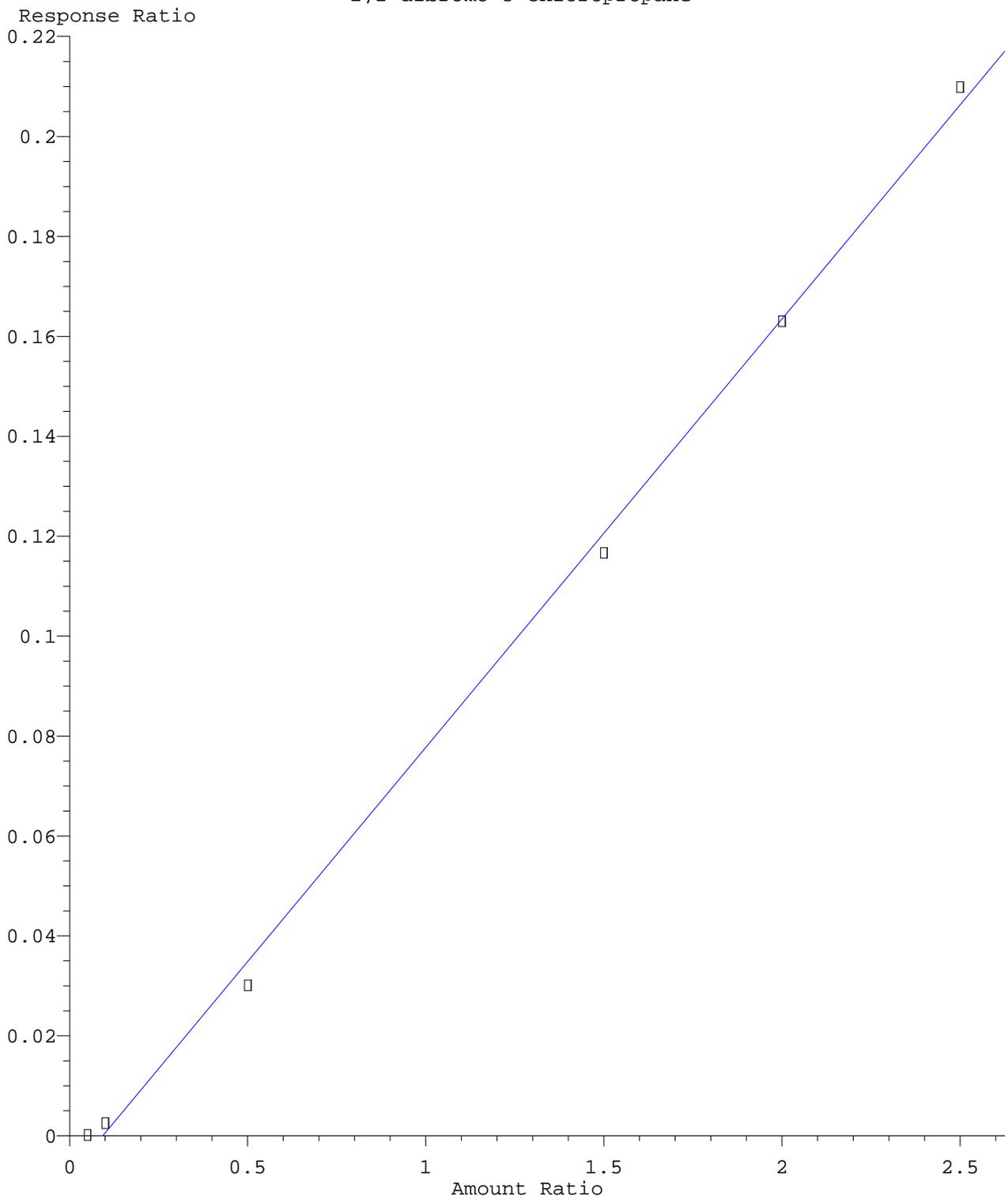
1,1,1,2-tetrachloroethane



Resp Ratio = 1.87e-001 * Amt - 1.09e-002
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017

1,2-dibromo-3-chloropropane

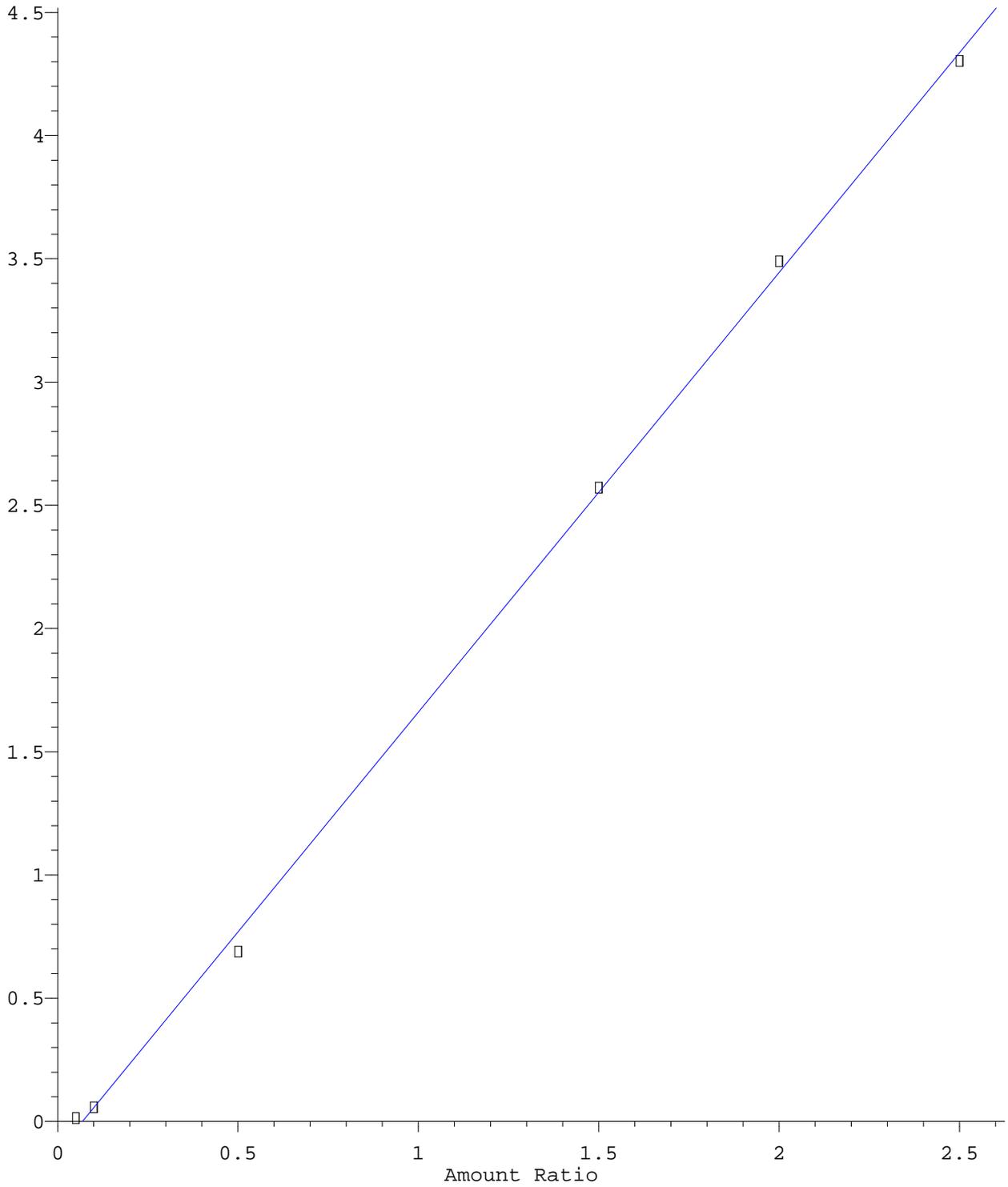


Resp Ratio = $8.57e-002 * Amt - 7.94e-003$
Coef of Det (r^2) = 0.998 Curve Fit: Linear

Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017

Benzyl chloride

Response Ratio

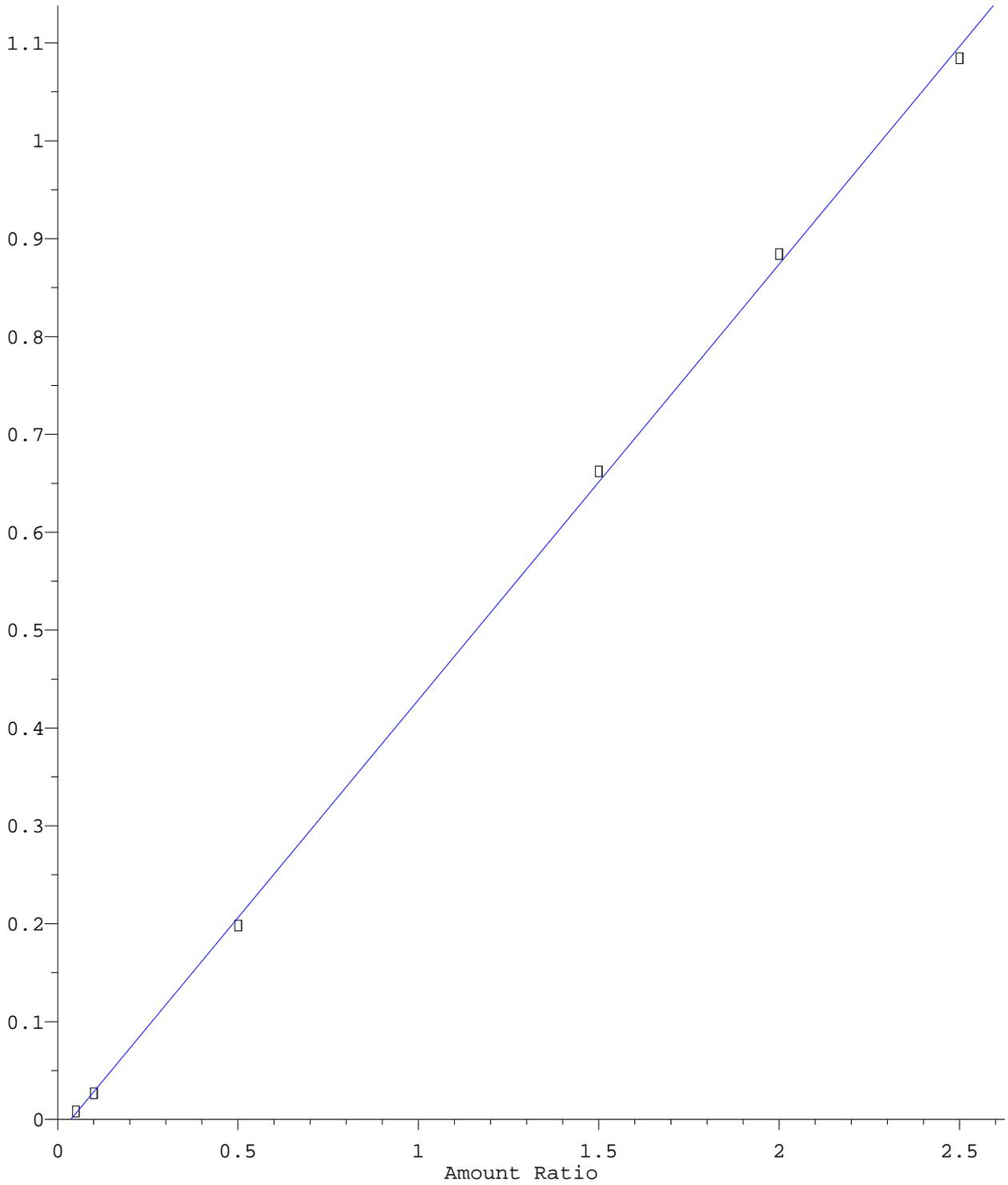


Resp Ratio = 1.78e+000 * Amt - 1.23e-001
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017

Bromodichloromethane

Response Ratio

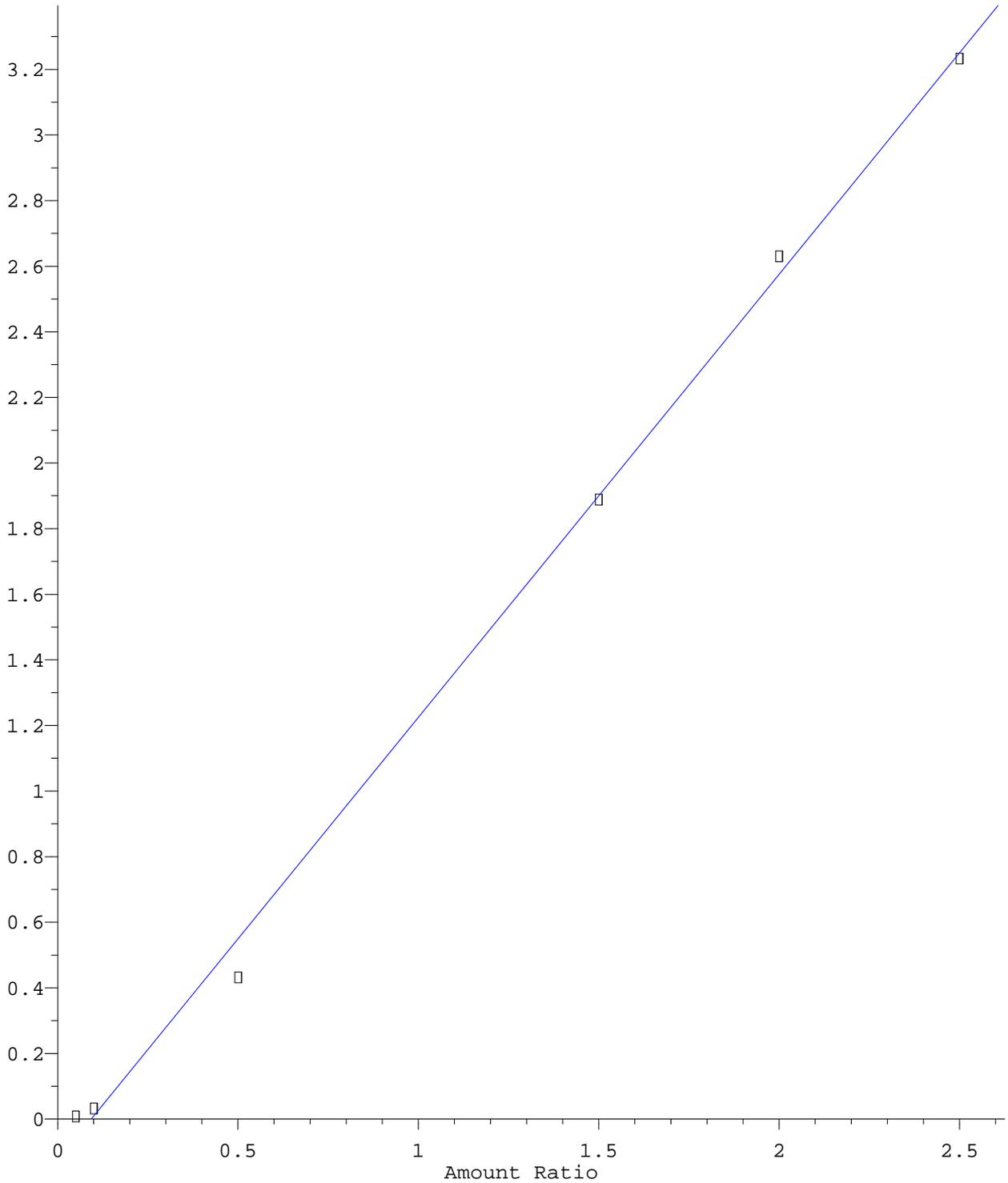


Resp Ratio = 4.45e-001 * Amt - 1.63e-002
Coef of Det (r^2) = 1.000 Curve Fit: Linear

Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017

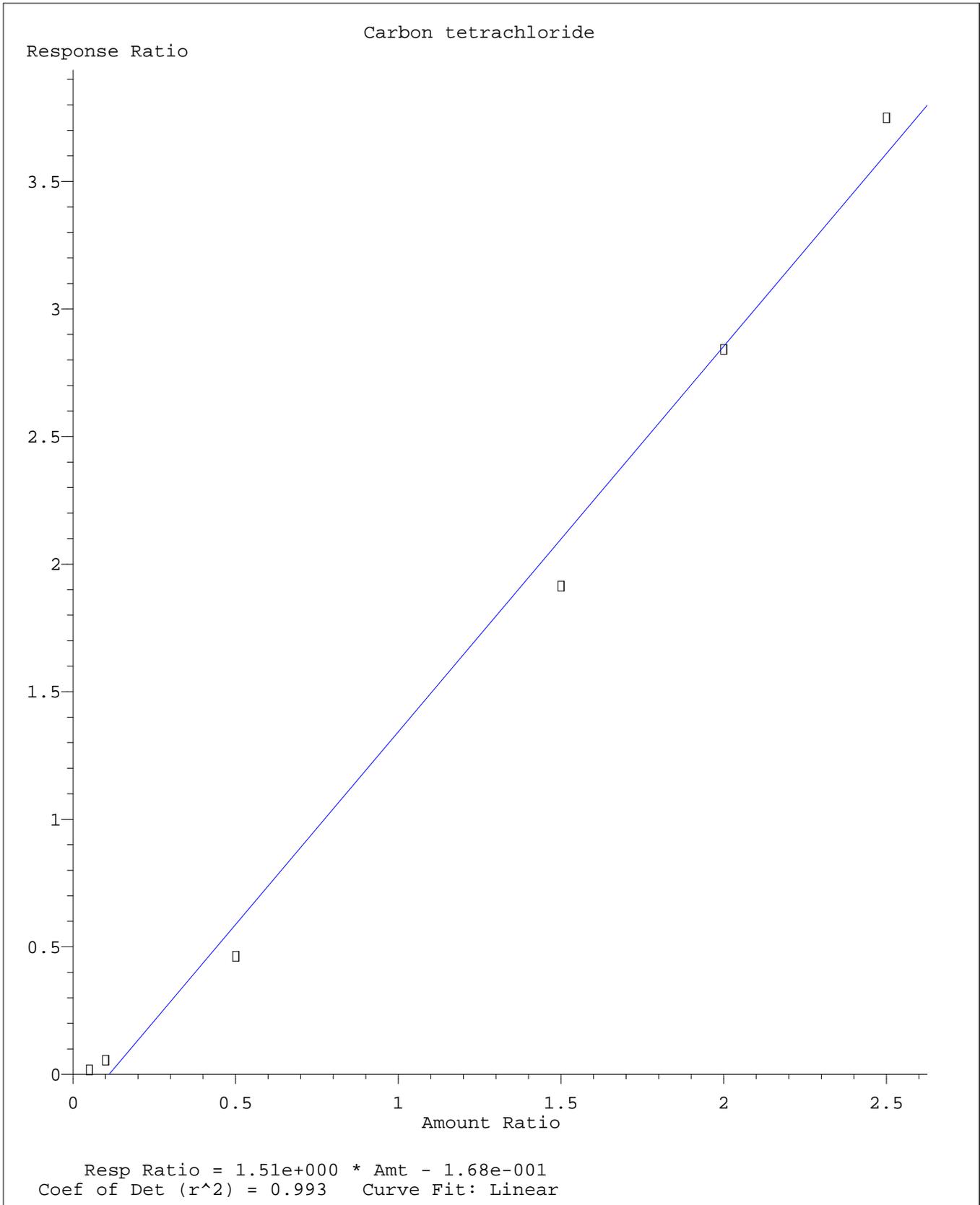
Bromoform (Tribromomethane)

Response Ratio



Resp Ratio = 1.35e+000 * Amt - 1.26e-001
Coef of Det (r^2) = 0.998 Curve Fit: Linear

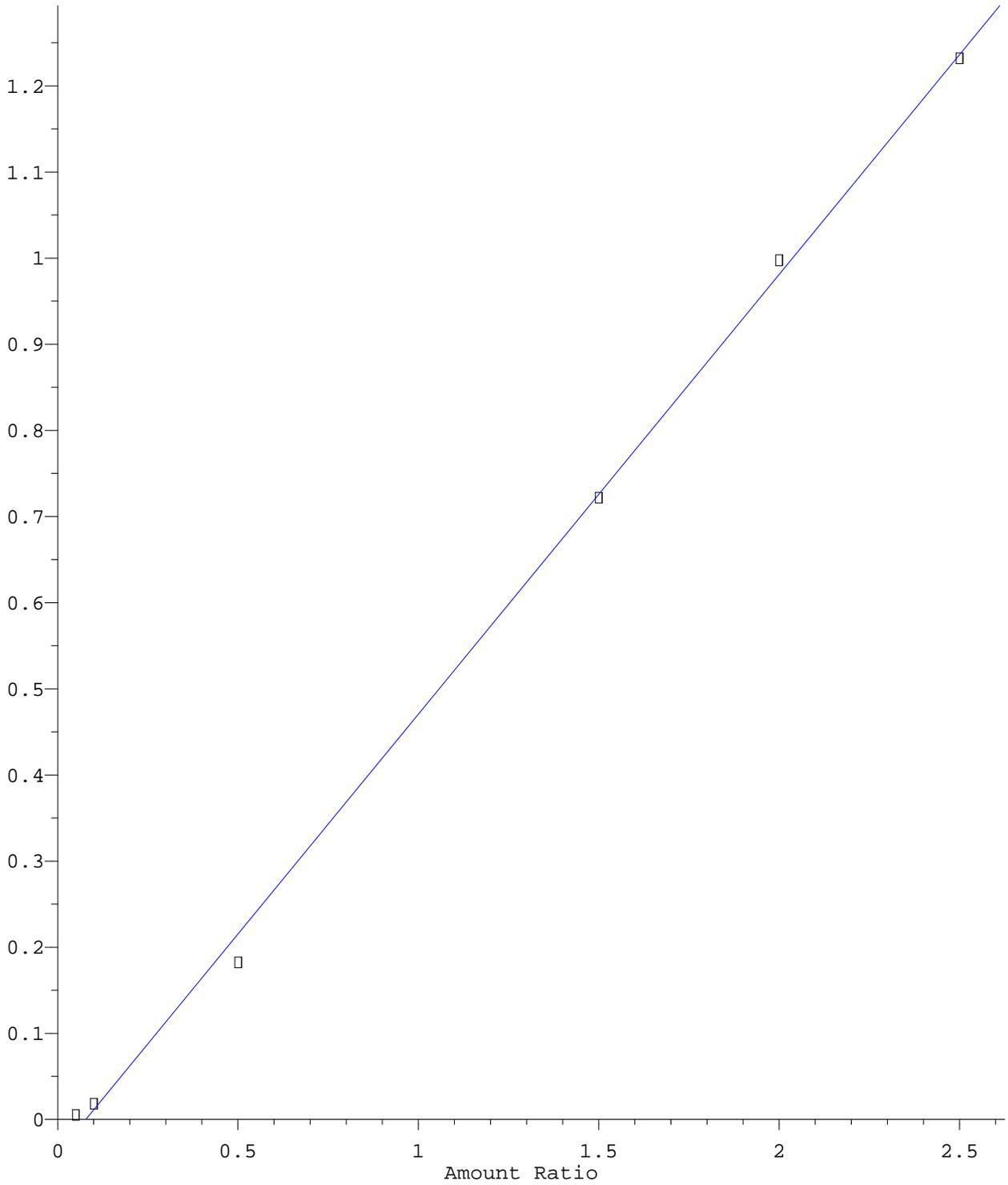
Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017



Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017

Dibromochloromethane

Response Ratio

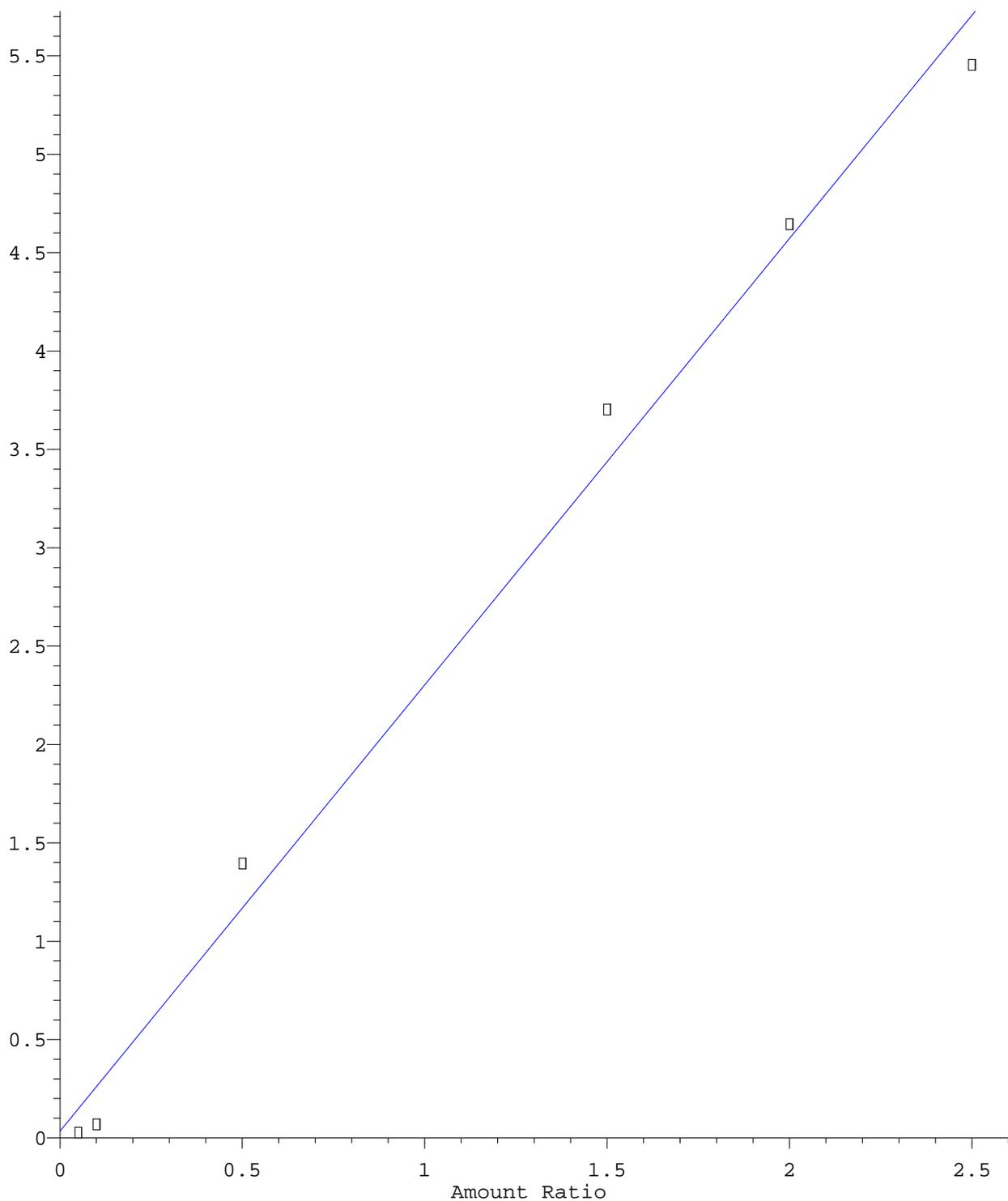


Resp Ratio = 5.10e-001 * Amt - 3.96e-002
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017

Diisopropyl ether

Response Ratio

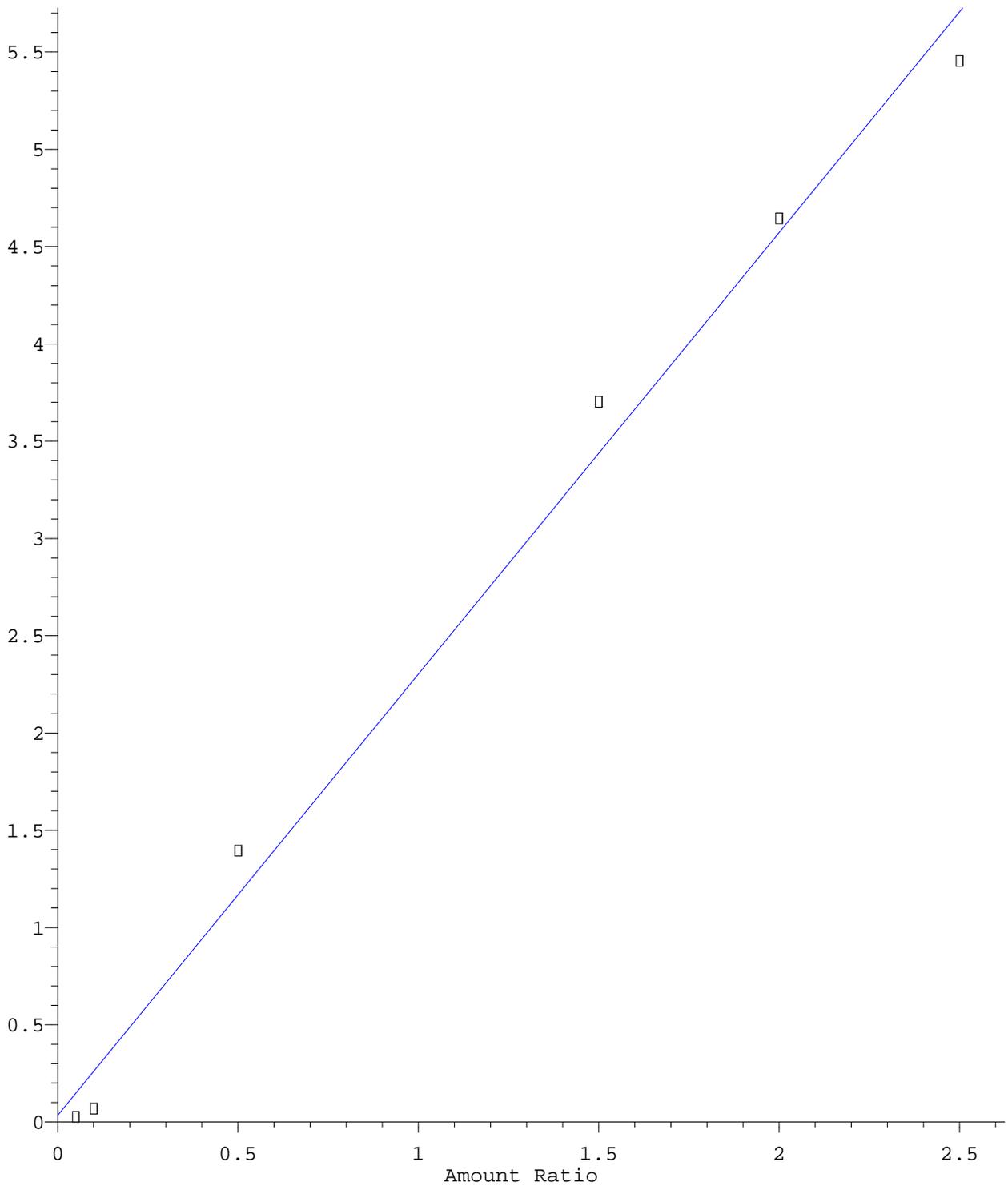


Resp Ratio = 2.27e+000 * Amt + 3.33e-002
Coef of Det (r^2) = 0.991 Curve Fit: Linear

Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017

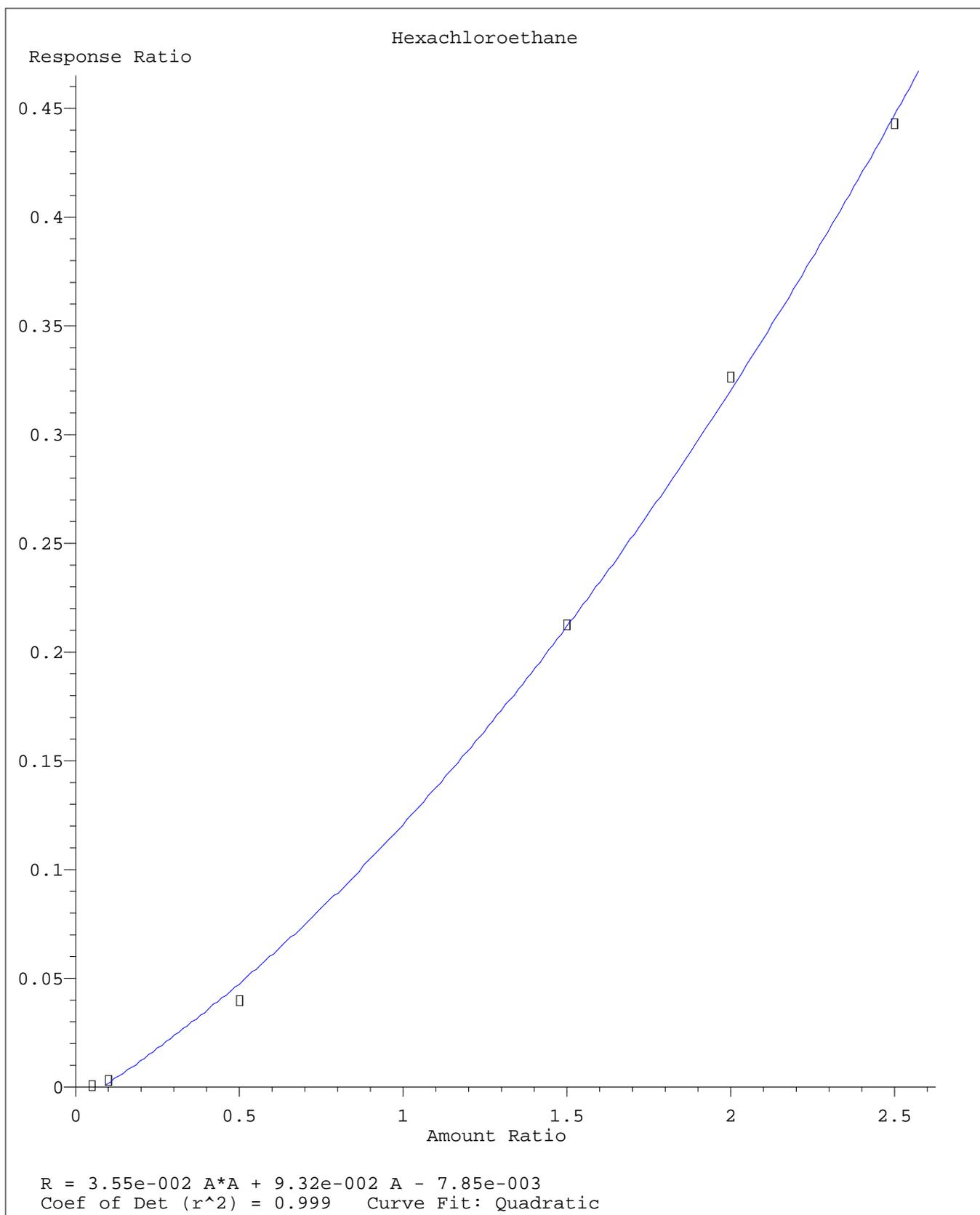
Ethyl acetate

Response Ratio



Resp Ratio = 2.27e+000 * Amt + 3.33e-002
Coef of Det (r^2) = 0.991 Curve Fit: Linear

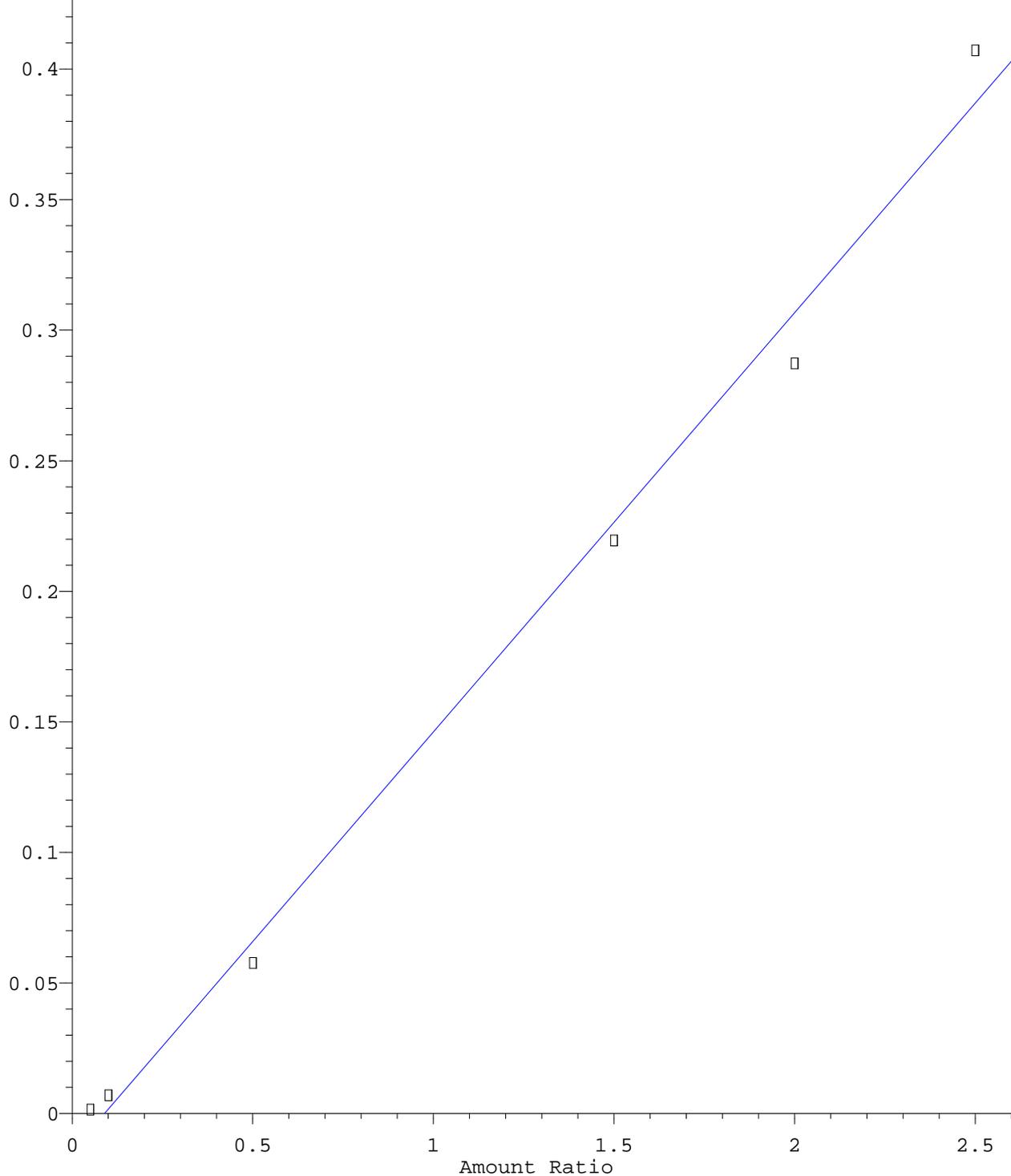
Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017



Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017

Naphthalene

Response Ratio



Resp Ratio = 1.60e-001 * Amt - 1.45e-002
Coef of Det (r^2) = 0.993 Curve Fit: Linear

Method Name: C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Calibration Table Last Updated: Fri Aug 11 08:56:01 2017



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Raw Data - ICV

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL10.D
 Acq On : 5 Jul 2017 2:50 pm
 Operator : MJB
 Sample : 1711838-ICV1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 15:09:22 2017

Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M

Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1

QLast Update : Wed Jul 05 14:48:03 2017

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.045	49	140265	10.000	ppbv	0.000
41) 1,4-Difluorobenzene	9.238	114	548361	10.000	ppbv	0.000
61) Chlorobenzene-d5	11.466	82	236064	10.000	ppbv	0.000

System Monitoring Compounds

69) 4-Bromofluorobenzene (...	12.183	95	322798	9.919	ppbv	0.000
Spiked Amount	10.000	Range	70 - 130	Recovery	=	99.190%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,1,1,2-Tetrafluoroethane	4.045	69	112	1.346	ppbv #	23
3) Propene	4.189	41	38297	5.445	ppbv	96
4) Dichlorodifluoromethane	4.255	85	114265	6.027	ppbv	99
5) Chloromethane	4.404	50	21100	5.620	ppbv	99
6) 1,2-Dichloro-1,1,2,2-t...	4.491	85	79951	5.721	ppbv	93
7) Vinyl chloride	4.604	62	29433	5.739	ppbv	100
8) 1,3-Butadiene	4.726	54	24017	5.724	ppbv	99
9) Bromomethane	4.983	94	32776	5.786	ppbv	100
10) Ethyl chloride	5.136	64	15483	5.695	ppbv	100
11) Ethanol	5.274	45	27442	12.834	ppbv	96
12) Vinyl bromide	5.449	106	60457	5.569	ppbv	99
13) Trichlorofluoromethane	5.812	101	118132	5.681	ppbv	99
14) Acetone	5.715	43	75018	6.270	ppbv	95
15) Isopropyl alcohol	5.956	45	79764	8.729	ppbv #	90
16) Acrylonitrile (2-Prope...	6.058	53	23707	5.619	ppbv	99
17) Iodomethane	6.299	142	96096	5.508	ppbv	87
18) 1,1-Dichloroethene	6.350	61	74387	5.690	ppbv	97
19) tert-Butyl alcohol	6.350	59	2393	0.523	ppbv #	57
20) Methylene chloride	6.437	49	52893	5.307	ppbv	88
21) Allyl chloride	6.539	41	93452	7.479	ppbv #	75
22) 1,1,2-Trichloro-1,2,2-...	6.662	101	105223	5.537	ppbv	94
23) Carbon disulfide	6.724	76	175648	5.607	ppbv	98
24) trans-1,2-Dichloroethe...	7.190	61	82791	5.639	ppbv	94
25) 1,1-Dichloroethane	7.349	63	89475	5.664	ppbv	97
26) MTBE	7.446	73	167696	5.791	ppbv	95
27) Vinyl acetate	7.446	43	163936	6.422	ppbv #	92
28) 2-Butanone (MEK)	7.666	43	106036	5.750	ppbv	94
29) cis-1,2-Dichloroethene...	7.932	61	66486	5.636	ppbv	96
30) Ethyl acetate	8.096	43	210561	6.468	ppbv #	94
31) Hexane	8.076	57	98759	6.086	ppbv #	75
32) Diisopropyl ether	8.096	43	210561	6.468	ppbv #	85
33) Chloroform	8.127	83	104069	5.693	ppbv	99
34) Tetrahydrofuran	8.460	42	60113	5.928	ppbv	94
35) tert-Butyl ethyl ether...	8.455	59	109833	5.848	ppbv	94
36) 1,2-Dichloroethane	8.614	62	64264	5.610	ppbv	99
37) 1,1,1-Trichloroethane	8.777	97	95085	6.119	ppbv	100
38) Benzene	9.054	78	176799	5.611	ppbv	99
39) Carbon tetrachloride	9.141	117	95122	5.600	ppbv	99
40) Cyclohexane	9.218	56	103709	4.934	ppbv	86
42) tert-Amyl methyl ether...	9.433	73	101618	6.050	ppbv #	92
43) Dibromomethane	9.505	93	40439	5.842	ppbv	92
44) 1,2-Dichloropropane	9.520	63	61936	5.966	ppbv #	94
45) Bromodichloromethane	9.622	83	132736	5.802	ppbv	98
46) Trichloroethene	9.648	130	89342	5.807	ppbv	95
47) 1,4-Dioxane	9.663	58	13722	3.157	ppbv #	1
48) Isooctane	9.663	57	306801	6.512	ppbv	92
49) Heptane	9.791	57	61790	5.851	ppbv	88
50) trans-1,3,-Dichloropro...	10.099	75	102728	6.216	ppbv	99
51) cis-1,3-Dichloropropene	10.365	75	89251	6.259	ppbv	98
52) Methyl isobutyl ketone	10.181	43	127075	6.372	ppbv	95
53) 1,1,2-Trichloroethane	10.467	97	73956	5.820	ppbv	98
54) Toluene	10.611	91	271831	5.634	ppbv	99
55) 2-Hexanone	10.780	43	118770	6.329	ppbv	97
56) Dibromochloromethane	10.826	129	136718	5.661	ppbv	99

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL10.D
 Acq On : 5 Jul 2017 2:50 pm
 Operator : MJB
 Sample : 1711838-ICV1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

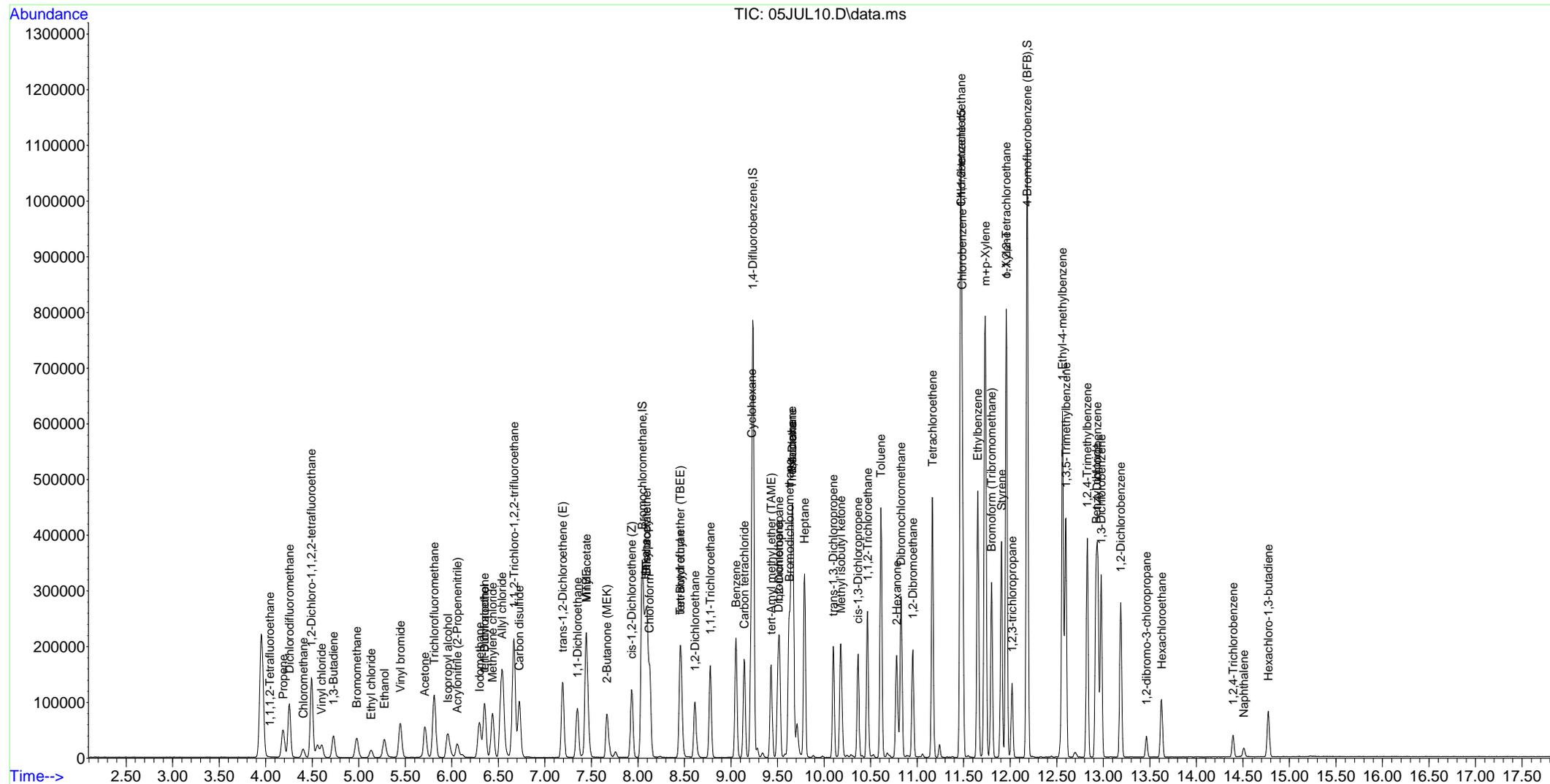
Quant Time: Jul 05 15:09:22 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Tetrachloroethene	11.164	166	122992	5.747	ppbv	98
58) 1,2-Dibromoethane	10.954	107	112434	6.025	ppbv	99
59) Chlorobenzene	11.487	112	188259	5.894	ppbv	97
60) 1,1,1,2-tetrachloroethane	11.476	131	52142	5.685	ppbv #	1
62) Ethylbenzene	11.651	106	99569	5.718	ppbv	96
63) m+p-Xylene	11.732	91	471358	12.145	ppbv	98
64) Bromoform (Tribromomet...	11.799	173	142372	5.401	ppbv #	98
65) Styrene	11.907	104	177208	5.855	ppbv #	96
66) 1,1,2,2-Tetrachloroethane	11.958	83	152696	6.613	ppbv	99
67) o-Xylene	11.958	91	238048	6.124	ppbv	96
68) 1,2,3-trichloropropane	12.019	75	48558	5.811	ppbv	99
70) 1-Ethyl-4-methylbenzene	12.562	105	341157	6.791	ppbv	95
71) 1,3,5-Trimethylbenzene	12.598	105	196058	5.780	ppbv	95
72) 1,2,4-Trimethylbenzene	12.828	105	201725	5.824	ppbv	98
73) Benzyl chloride	12.921	91	192276	5.257	ppbv	95
74) 1,3-Dichlorobenzene	12.977	146	78038	5.124	ppbv	99
75) 1,4-Dichlorobenzene	12.941	146	145936	5.950	ppbv	99
76) 1,2-Dichlorobenzene	13.187	146	117476	5.693	ppbv	99
77) 1,2-dibromo-3-chloropr...	13.464	75	8811	5.282	ppbv	92
78) Hexachloroethane	13.627	117	16101	6.537	ppbv #	78
79) 1,2,4-Trichlorobenzene	14.396	180	14195	4.623	ppbv	100
80) Naphthalene	14.508	128	14670	4.778	ppbv	100
81) Hexachloro-1,3-butadiene	14.775	225	24621	4.889	ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL10.D
 Acq On : 5 Jul 2017 2:50 pm
 Operator : MJB
 Sample : 1711838-ICV1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 15:09:22 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration





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Raw Data - ICB

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL11.D
 Acq On : 5 Jul 2017 3:18 pm
 Operator : MJB
 Sample : 1711838-ICB1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 08:47:49 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.046	49	145364	10.000	ppbv	0.000
41) 1,4-Difluorobenzene	9.239	114	558453	10.000	ppbv	0.000
61) Chlorobenzene-d5	11.467	82	240242	10.000	ppbv	0.000

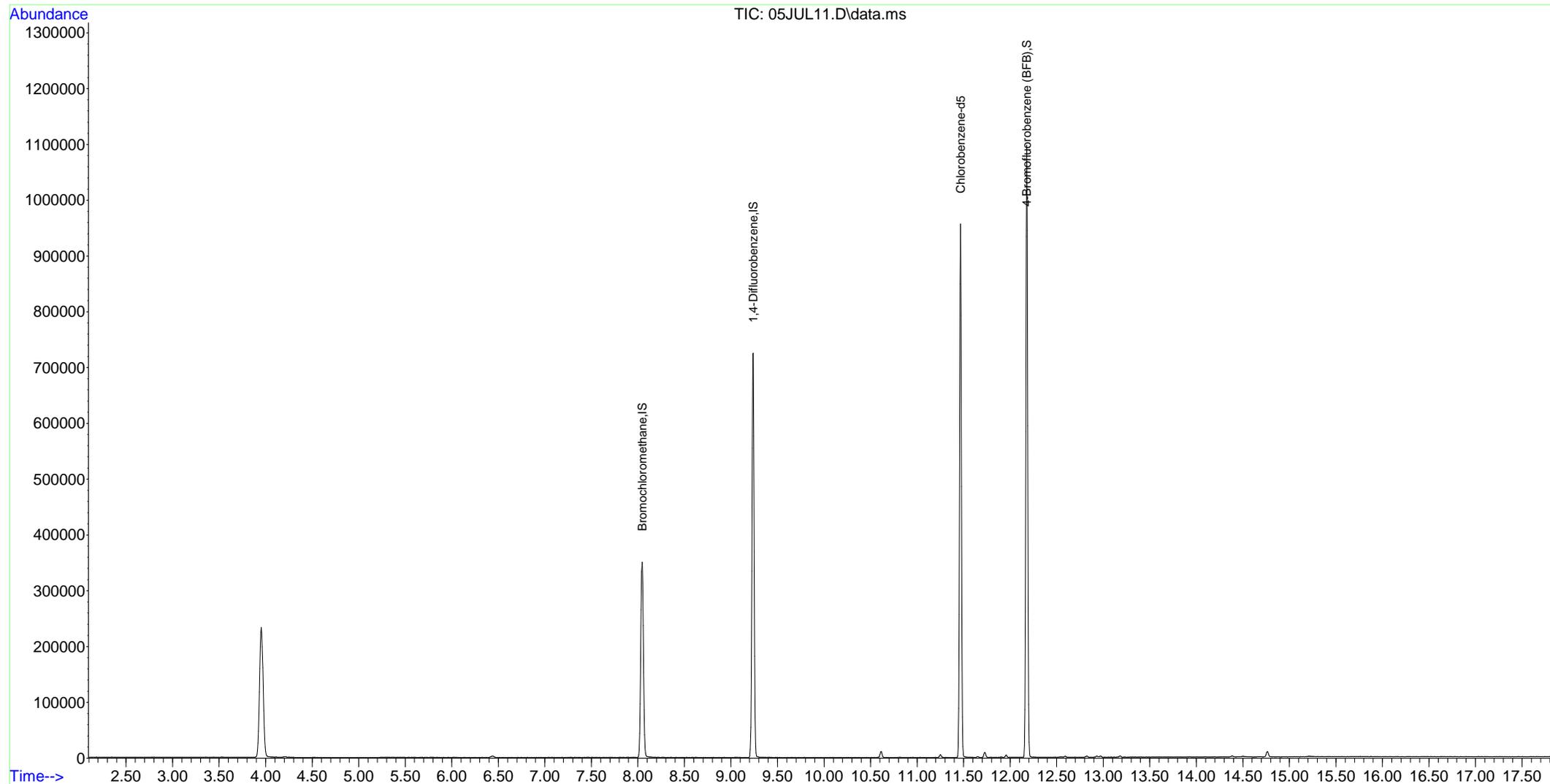
System Monitoring Compounds
 69) 4-Bromofluorobenzene (... 12.178 95 315720 9.533 ppbv 0.000
 Spiked Amount 10.000 Range 70 - 130 Recovery = 95.330%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL11.D
 Acq On : 5 Jul 2017 3:18 pm
 Operator : MJB
 Sample : 1711838-ICB1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 08:47:49 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 05 14:48:03 2017
 Response via : Initial Calibration





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Raw Data - CCV

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG03.D
 Acq On : 5 Aug 2017 9:15 am
 Operator : MJB
 Sample : 1713858-CCV2
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 05 09:36:27 2017

Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M

Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1

QLast Update : Wed Jul 12 14:25:41 2017

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.039	49	107524	10.000	ppbv	0.000
42) 1,4-Difluorobenzene	9.232	114	405916	10.000	ppbv	0.000
62) Chlorobenzene-d5	11.460	82	202118	10.000	ppbv	0.000

System Monitoring Compounds

70) 4-Bromofluorobenzene (...	12.172	95	317636	11.400	ppbv	0.000
Spiked Amount	10.000	Range	70 - 130	Recovery	=	114.000%

Target Compounds

						Qvalue
2) 1,1,1,2-Tetrafluoroethane	4.034	83	1875	29.388	ppbv	84
4) Propene	4.183	41	28284	5.246	ppbv	97
5) Dichlorodifluoromethane	4.249	85	81237	5.590	ppbv	99
6) Chloromethane	4.398	50	14439	5.017	ppbv	99
7) 1,2-Dichloro-1,1,2,2-t...	4.485	85	56842	5.306	ppbv	97
8) Vinyl chloride	4.598	62	20094	5.111	ppbv	99
9) 1,3-Butadiene	4.726	54	16663	5.181	ppbv	96
10) Bromomethane	4.971	94	22644	5.214	ppbv	98
11) Ethyl chloride	5.125	64	10585	5.079	ppbv	100
12) Ethanol	5.258	45	27203	16.596	ppbv	98
13) Vinyl bromide	5.443	106	39639	4.763	ppbv	99
14) Trichlorofluoromethane	5.806	101	81911	5.139	ppbv	99
15) Acetone	5.688	43	95620	10.425	ppbv #	80
16) Isopropyl alcohol	5.934	45	61584	8.792	ppbv	93
17) Acrylonitrile (2-Prope...	6.052	53	23542	7.279	ppbv	99
18) Iodomethane	6.293	142	89934	6.724	ppbv	89
19) 1,1-Dichloroethene	6.344	61	52104	5.199	ppbv	93
20) tert-Butyl alcohol	6.349	59	1641	0.468	ppbv #	57
21) Methylene chloride	6.431	49	38371	5.023	ppbv	85
22) Allyl chloride	6.539	41	78663	8.213	ppbv #	66
23) 1,1,2-Trichloro-1,2,2-...	6.656	101	72325	4.965	ppbv	99
24) Carbon disulfide	6.718	76	118767	4.946	ppbv	99
25) trans-1,2-Dichloroethe...	7.184	61	56108	4.985	ppbv	91
26) 1,1-Dichloroethane	7.343	63	62058	5.125	ppbv	97
27) MTBE	7.430	73	112664	5.075	ppbv #	84
28) Vinyl acetate	7.435	43	137797	7.042	ppbv #	89
29) 2-Butanone (MEK)	7.655	43	76947	5.443	ppbv	91
30) cis-1,2-Dichloroethene...	7.926	61	45393	5.020	ppbv	93
31) Ethyl acetate	8.085	43	163153	6.540	ppbv #	97
32) Hexane	8.070	57	70862	5.696	ppbv	84
33) Diisopropyl ether	8.085	43	163153	6.540	ppbv #	91
34) Chloroform	8.126	83	71221	5.082	ppbv	99
35) Tetrahydrofuran	8.444	42	44271	5.695	ppbv	91
36) tert-Butyl ethyl ether...	8.444	59	105759	7.346	ppbv	93
37) 1,2-Dichloroethane	8.608	62	44240	5.038	ppbv	98
38) 1,1,1-Trichloroethane	8.771	97	64813	5.441	ppbv	98
39) Benzene	9.048	78	116163	4.809	ppbv	98
40) Carbon tetrachloride	9.140	117	68780	5.345	ppbv	98
41) Cyclohexane	9.217	56	76513	4.748	ppbv	85
43) tert-Amyl methyl ether...	9.417	73	102170	8.217	ppbv #	91
44) Dibromomethane	9.499	93	38186	7.453	ppbv	96
45) 1,2-Dichloropropane	9.519	63	41262	5.369	ppbv	94
46) Bromodichloromethane	9.622	83	96794	5.721	ppbv	96
47) Trichloroethene	9.642	130	55844	4.903	ppbv	98
48) 1,4-Dioxane	9.663	58	9029	2.807	ppbv #	1
49) Isooctane	9.663	57	210124	6.025	ppbv	97
50) Heptane	9.785	57	43357	5.547	ppbv	84
51) trans-1,3,-Dichloropro...	10.098	75	65512	5.355	ppbv	98
52) cis-1,3-Dichloropropene	10.359	75	58277	5.521	ppbv	98
53) Methyl isobutyl ketone	10.170	43	90832	6.153	ppbv #	96
54) 1,1,2-Trichloroethane	10.461	97	46682	4.963	ppbv	98
55) Toluene	10.610	91	144683	4.051	ppbv	100
56) 2-Hexanone	10.769	43	85636	6.164	ppbv	98
57) Dibromochloromethane	10.825	129	92547	5.243	ppbv	99

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG03.D
 Acq On : 5 Aug 2017 9:15 am
 Operator : MJB
 Sample : 1713858-CCV2
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

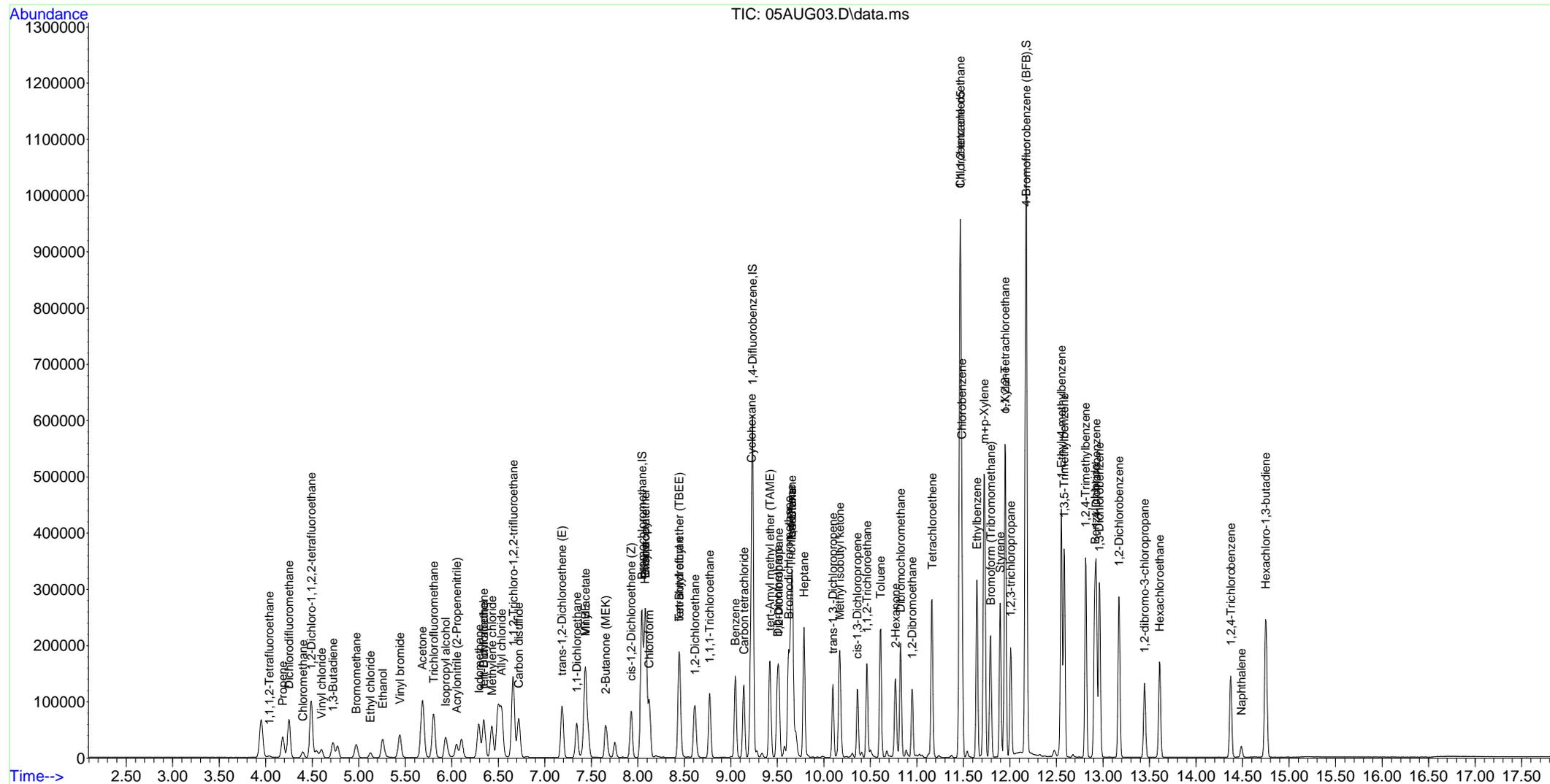
Quant Time: Aug 05 09:36:27 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
58) Tetrachloroethene	11.163	166	74653	4.712	ppbv	98
59) 1,2-Dibromoethane	10.948	107	71350	5.165	ppbv	99
60) Chlorobenzene	11.486	112	121738	5.148	ppbv	99
61) 1,1,1,2-tetrachloroethane	11.470	131	59796	8.485	ppbv #	1
63) Ethylbenzene	11.645	106	62500	4.192	ppbv	99
64) m+p-Xylene	11.721	91	297624	8.956	ppbv	100
65) Bromoform (Tribromomet...	11.793	173	96156	4.458	ppbv	99
66) Styrene	11.895	104	118062	4.556	ppbv #	93
67) 1,1,2,2-Tetrachloroethane	11.947	83	113741	5.754	ppbv	100
68) o-Xylene	11.952	91	155487	4.672	ppbv	97
69) 1,2,3-trichloropropane	12.008	75	72264	10.100	ppbv	98
71) 1-Ethyl-4-methylbenzene	12.551	105	254787	5.923	ppbv	95
72) 1,3,5-Trimethylbenzene	12.582	105	160958	5.542	ppbv	98
73) 1,2,4-Trimethylbenzene	12.812	105	181651	6.125	ppbv	100
74) Benzyl chloride	12.909	91	152872	4.931	ppbv	97
75) 1,3-Dichlorobenzene	12.966	146	93049	7.136	ppbv	99
76) 1,4-Dichlorobenzene	12.925	146	127643	6.078	ppbv	99
77) 1,2-Dichlorobenzene	13.171	146	117409	6.645	ppbv	100
78) 1,2-dibromo-3-chloropr...	13.447	75	31241	18.963	ppbv	99
79) Hexachloroethane	13.606	117	31953	12.171	ppbv	98
80) 1,2,4-Trichlorobenzene	14.374	180	50857	19.344	ppbv	100
81) Naphthalene	14.487	128	18397	6.578	ppbv	99
82) Hexachloro-1,3-butadiene	14.753	225	75054	17.408	ppbv	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG03.D
 Acq On : 5 Aug 2017 9:15 am
 Operator : MJB
 Sample : 1713858-CCV2
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 05 09:36:27 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration





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Raw Data - CCB

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG04.D
 Acq On : 5 Aug 2017 9:43 am
 Operator : MJB
 Sample : 1713858-CCB1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 05 10:20:44 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.039	49	97031	10.000	ppbv	0.000
42) 1,4-Difluorobenzene	9.232	114	343659	10.000	ppbv	0.000
62) Chlorobenzene-d5	11.460	82	148580	10.000	ppbv	0.000

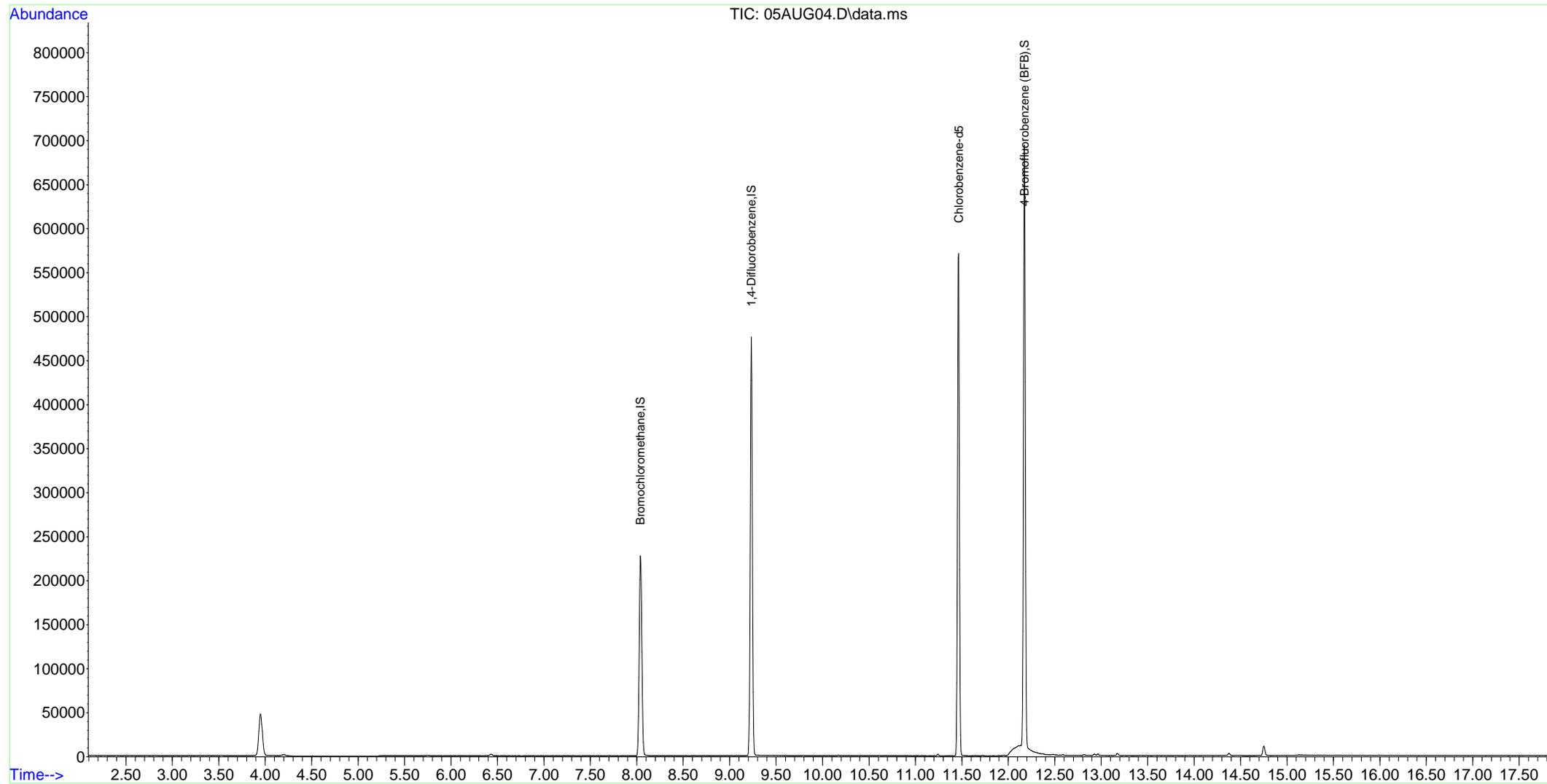
System Monitoring Compounds
 70) 4-Bromofluorobenzene (... 12.172 95 200610 9.794 ppbv 0.000
 Spiked Amount 10.000 Range 70 - 130 Recovery = 97.940%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG04.D
 Acq On : 5 Aug 2017 9:43 am
 Operator : MJB
 Sample : 1713858-CCB1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 05 10:20:44 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration





Raw Data - Tune

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL03.D
 Acq On : 5 Jul 2017 10:48 am
 Operator : MJB
 Sample : 1711838-TUN1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 13:22:04 2017
 Quant Method : C:\msdchem\1\METHODS\201703\28-2358\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Thu Jun 08 09:14:58 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.040	49	157596	10.000	ppbv	-0.010
41) 1,4-Difluorobenzene	9.233	114	605524	10.000	ppbv	0.000
61) Chlorobenzene-d5	11.466	82	261156	10.000	ppbv	0.000

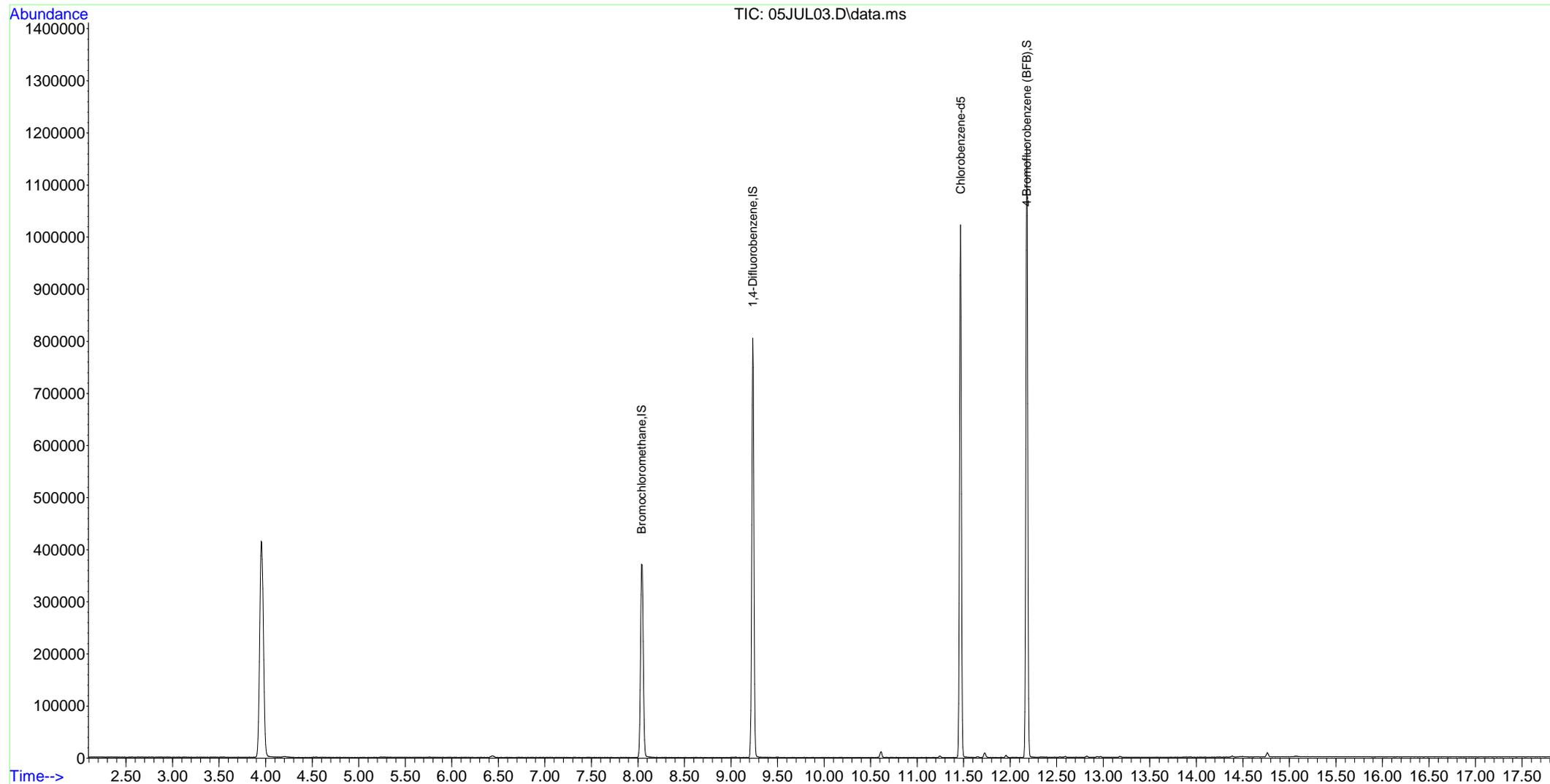
System Monitoring Compounds
 69) 4-Bromofluorobenzene (... 12.178 95 342738 8.236 ppbv 0.000
 Spiked Amount 10.000 Range 70 - 130 Recovery = 82.360%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\JUL2017\JUL05\
 Data File : 05JUL03.D
 Acq On : 5 Jul 2017 10:48 am
 Operator : MJB
 Sample : 1711838-TUN1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 13:22:04 2017
 Quant Method : C:\msdchem\1\METHODS\201703\28-2358\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Thu Jun 08 09:14:58 2017
 Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG01.D
 Acq On : 5 Aug 2017 8:13 am
 Operator : MJB
 Sample : 1713858-TUN1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 05 08:32:07 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.034	49	97474	10.000	ppbv	-0.014
42) 1,4-Difluorobenzene	9.227	114	350182	10.000	ppbv	0.000
62) Chlorobenzene-d5	11.460	82	132938	10.000	ppbv	0.000

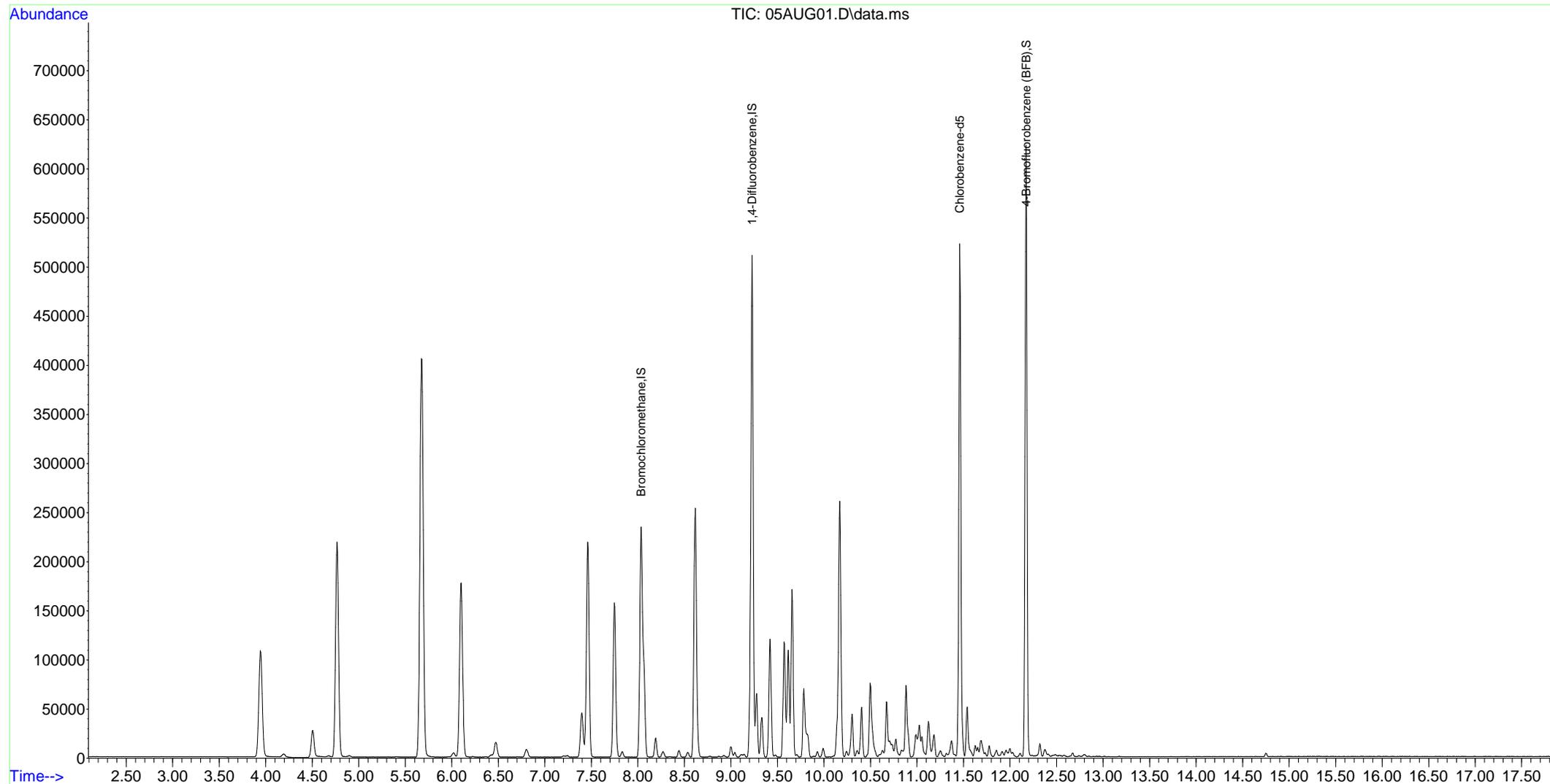
System Monitoring Compounds
 70) 4-Bromofluorobenzene (... 12.172 95 180321 9.839 ppbv 0.000
 Spiked Amount 10.000 Range 70 - 130 Recovery = 98.390%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG01.D
 Acq On : 5 Aug 2017 8:13 am
 Operator : MJB
 Sample : 1713858-TUN1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 05 08:32:07 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration





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Raw Data - Method Blank

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG05.D
 Acq On : 5 Aug 2017 10:11 am
 Operator : MJB
 Sample : B[H0513-BLK1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 05 10:59:25 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.039	49	92650	10.000	ppbv	0.000
42) 1,4-Difluorobenzene	9.232	114	325790	10.000	ppbv	0.000
62) Chlorobenzene-d5	11.465	82	141686	10.000	ppbv	0.000

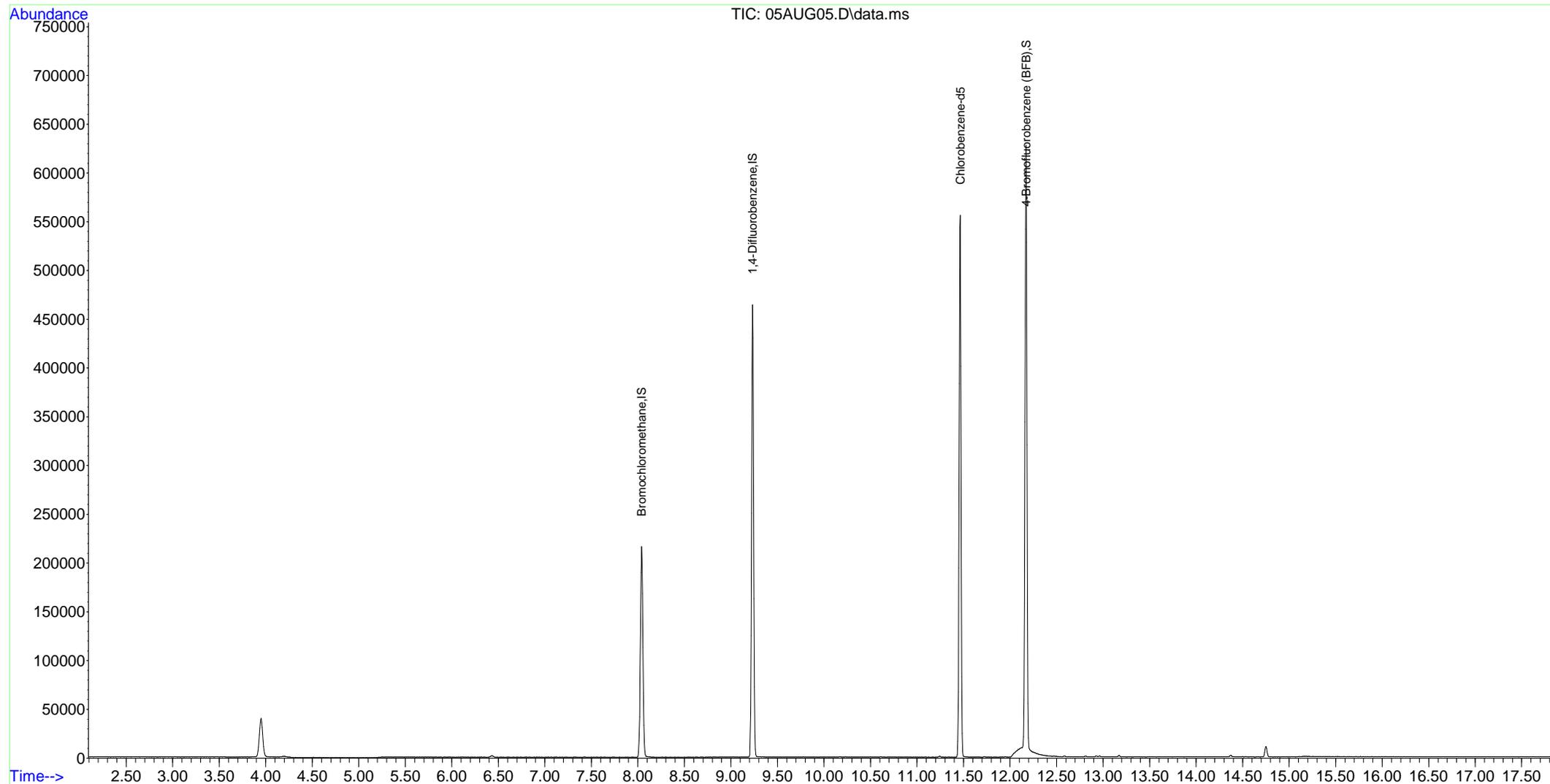
System Monitoring Compounds
 70) 4-Bromofluorobenzene (... 12.172 95 177675 9.097 ppbv 0.000
 Spiked Amount 10.000 Range 70 - 130 Recovery = 90.970%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
Data File : 05AUG05.D
Acq On : 5 Aug 2017 10:11 am
Operator : MJB
Sample : B[H0513-BLK1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 05 10:59:25 2017
Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
QLast Update : Wed Jul 12 14:25:41 2017
Response via : Initial Calibration





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Raw Data - Lab Control Sample

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG06.D
 Acq On : 5 Aug 2017 10:42 am
 Operator : MJB
 Sample : B[H0513-BS1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 08:27:57 2017

Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M

Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1

QLast Update : Wed Jul 12 14:25:41 2017

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.044	49	95916	10.000	ppbv	0.000
42) 1,4-Difluorobenzene	9.232	114	347614	10.000	ppbv	0.000
62) Chlorobenzene-d5	11.465	82	158345	10.000	ppbv	0.000

System Monitoring Compounds

70) 4-Bromofluorobenzene (...	12.172	95	204409	9.364	ppbv	0.000
Spiked Amount	10.000	Range	70 - 130	Recovery	=	93.640%

Target Compounds

						Qvalue
2) 1,1,1,2-Tetrafluoroethane	4.039	83	1779	31.258	ppbv	96
4) Propene	4.183	41	25531	5.309	ppbv	98
5) Dichlorodifluoromethane	4.249	85	77777	6.000	ppbv	99
6) Chloromethane	4.403	50	13270	5.169	ppbv	99
7) 1,2-Dichloro-1,1,2,2-t...	4.490	85	60154	6.295	ppbv	94
8) Vinyl chloride	4.603	62	19504	5.562	ppbv	98
9) 1,3-Butadiene	4.726	54	16079	5.604	ppbv	100
10) Bromomethane	4.977	94	22564	5.825	ppbv	100
11) Ethyl chloride	5.130	64	10189	5.480	ppbv	100
12) Ethanol	5.263	45	24660	16.865	ppbv	98
13) Vinyl bromide	5.443	106	34735	4.679	ppbv	99
14) Trichlorofluoromethane	5.806	101	76676	5.392	ppbv	100
15) Acetone	5.704	43	50709	6.198	ppbv	100
16) Isopropyl alcohol	5.945	45	54894	8.785	ppbv	95
17) Acrylonitrile (2-Prope...	6.057	53	20805	7.211	ppbv	97
18) Iodomethane	6.293	142	77919	6.531	ppbv	92
19) 1,1-Dichloroethene	6.349	61	47106	5.269	ppbv	91
20) tert-Butyl alcohol	6.349	59	1474	0.471	ppbv #	49
21) Methylene chloride	6.431	49	34757	5.100	ppbv	83
22) Allyl chloride	6.539	41	74373	8.705	ppbv #	64
23) 1,1,2-Trichloro-1,2,2-...	6.662	101	65103	5.010	ppbv	100
24) Carbon disulfide	6.723	76	105640	4.931	ppbv	100
25) trans-1,2-Dichloroethe...	7.189	61	50337	5.014	ppbv	89
26) 1,1-Dichloroethane	7.348	63	56748	5.253	ppbv	96
27) MTBE	7.435	73	99706	5.035	ppbv	96
28) Vinyl acetate	7.440	43	100464	5.755	ppbv #	90
29) 2-Butanone (MEK)	7.660	43	70754	5.611	ppbv	89
30) cis-1,2-Dichloroethene...	7.932	61	40792	5.057	ppbv	92
31) Ethyl acetate	8.090	43	149048	6.701	ppbv	98
32) Hexane	8.070	57	58379	5.261	ppbv	95
33) Diisopropyl ether	8.090	43	149048	6.701	ppbv #	94
34) Chloroform	8.126	83	65350	5.227	ppbv	99
35) Tetrahydrofuran	8.449	42	40519	5.844	ppbv	89
36) tert-Butyl ethyl ether...	8.449	59	93188	7.256	ppbv	92
37) 1,2-Dichloroethane	8.608	62	41529	5.301	ppbv	98
38) 1,1,1-Trichloroethane	8.772	97	59982	5.644	ppbv	96
39) Benzene	9.053	78	101784	4.724	ppbv	98
40) Carbon tetrachloride	9.140	117	64299	5.548	ppbv	99
41) Cyclohexane	9.217	56	64149	4.463	ppbv	84
43) tert-Amyl methyl ether...	9.422	73	87102	8.180	ppbv	95
44) Dibromomethane	9.499	93	34730	7.915	ppbv	96
45) 1,2-Dichloropropane	9.519	63	36741	5.583	ppbv	95
46) Bromodichloromethane	9.622	83	84702	5.838	ppbv	98
47) Trichloroethene	9.642	130	49362	5.061	ppbv	99
48) 1,4-Dioxane	9.663	58	8633	3.134	ppbv #	1
49) Isooctane	9.663	57	190871	6.391	ppbv	94
50) Heptane	9.786	57	37400	5.587	ppbv	82
51) trans-1,3,-Dichloropro...	10.098	75	57898	5.526	ppbv	96
52) cis-1,3-Dichloropropene	10.364	75	52703	5.830	ppbv	97
53) Methyl isobutyl ketone	10.170	43	83014	6.566	ppbv #	95
54) 1,1,2-Trichloroethane	10.467	97	41357	5.134	ppbv	97
55) Toluene	10.610	91	129117	4.222	ppbv	100
56) 2-Hexanone	10.769	43	77512	6.515	ppbv #	98
57) Dibromochloromethane	10.825	129	85570	5.599	ppbv	99

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG06.D
 Acq On : 5 Aug 2017 10:42 am
 Operator : MJB
 Sample : B[H0513-BS1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

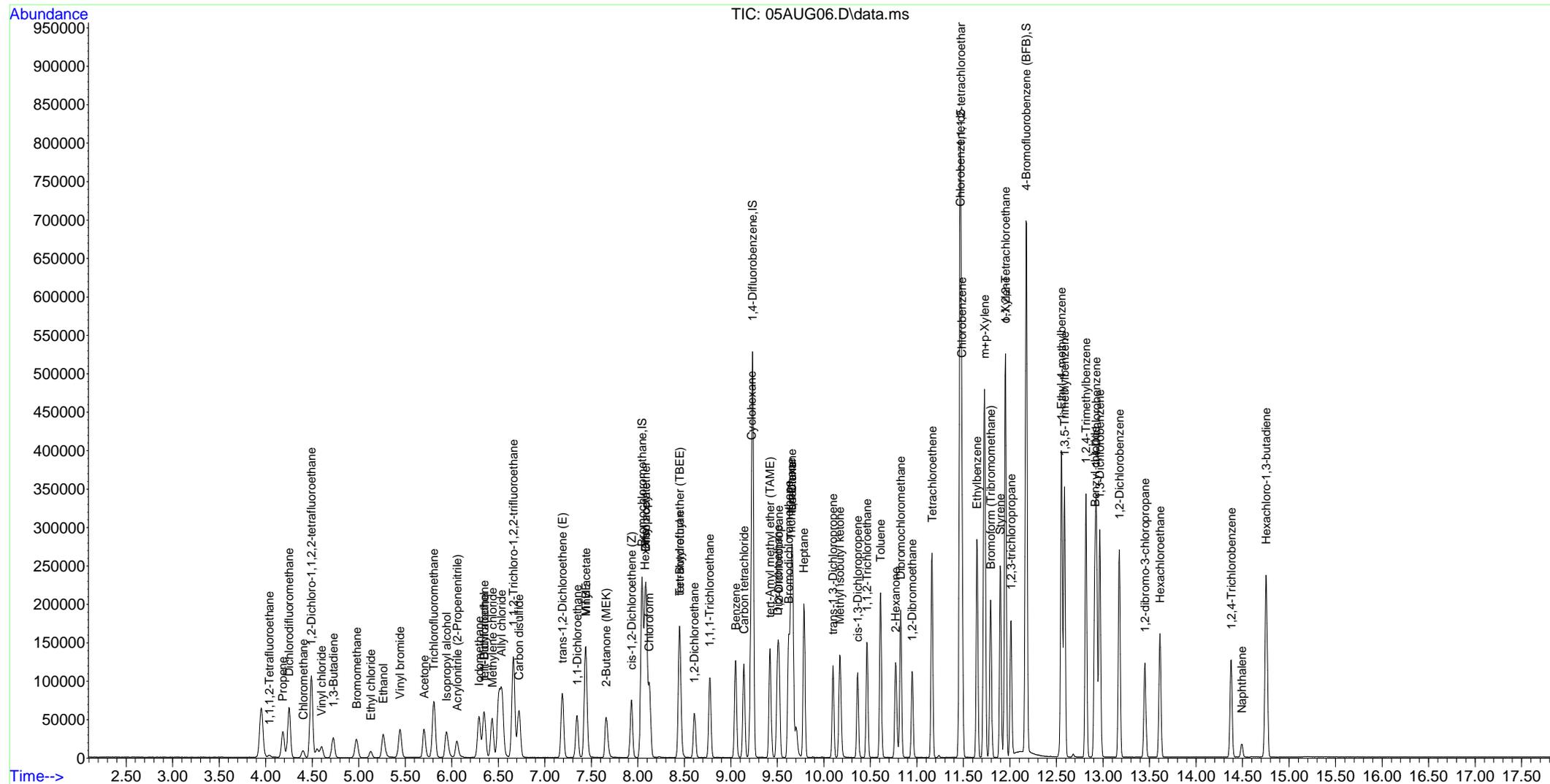
Quant Time: Aug 06 08:27:57 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
58) Tetrachloroethene	11.163	166	67712	4.991	ppbv	98
59) 1,2-Dibromoethane	10.948	107	64531	5.455	ppbv	99
60) Chlorobenzene	11.486	112	109572	5.411	ppbv	98
61) 1,1,1,2-tetrachloroethane	11.476	131	55515	9.150	ppbv #	1
63) Ethylbenzene	11.645	106	55501	4.752	ppbv	99
64) m+p-Xylene	11.727	91	273915	10.522	ppbv	100
65) Bromoform (Tribromomet...	11.793	173	89372	5.114	ppbv	99
66) Styrene	11.901	104	106735	5.258	ppbv #	92
67) 1,1,2,2-Tetrachloroethane	11.947	83	104045	6.718	ppbv	100
68) o-Xylene	11.952	91	143988	5.522	ppbv	98
69) 1,2,3-trichloropropane	12.013	75	67014	11.955	ppbv	98
71) 1-Ethyl-4-methylbenzene	12.551	105	241614	7.170	ppbv	95
72) 1,3,5-Trimethylbenzene	12.587	105	158331	6.959	ppbv	94
73) 1,2,4-Trimethylbenzene	12.817	105	167954	7.229	ppbv	99
74) Benzyl chloride	12.910	91	140386	5.661	ppbv	97
75) 1,3-Dichlorobenzene	12.966	146	102889	10.072	ppbv	96
76) 1,4-Dichlorobenzene	12.930	146	117721	7.155	ppbv	95
77) 1,2-Dichlorobenzene	13.176	146	108128	7.812	ppbv	100
78) 1,2-dibromo-3-chloropr...	13.452	75	29690	22.807	ppbv	96
79) Hexachloroethane	13.611	117	29514	13.702	ppbv	98
80) 1,2,4-Trichlorobenzene	14.379	180	44795	21.748	ppbv	100
81) Naphthalene	14.492	128	16869	7.545	ppbv	100
82) Hexachloro-1,3-butadiene	14.753	225	72764	21.542	ppbv	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG06.D
 Acq On : 5 Aug 2017 10:42 am
 Operator : MJB
 Sample : B[H0513-BS1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 08:27:57 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration





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Raw Data - Lab Control Sample Duplicate

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG07.D
 Acq On : 5 Aug 2017 11:14 am
 Operator : MJB
 Sample : B[H0513-BSD1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 08:28:08 2017

Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M

Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1

QLast Update : Wed Jul 12 14:25:41 2017

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.042	49	97736	10.000	ppbv	0.000
42) 1,4-Difluorobenzene	9.235	114	348136	10.000	ppbv	0.000
62) Chlorobenzene-d5	11.463	82	155160	10.000	ppbv	0.000

System Monitoring Compounds

70) 4-Bromofluorobenzene (...	12.170	95	194929	9.113	ppbv	-0.011
Spiked Amount	10.000	Range	70 - 130	Recovery	=	91.130%

Target Compounds

						Qvalue
2) 1,1,1,2-Tetrafluoroethane	4.037	83	1850	31.900	ppbv	99
4) Propene	4.185	41	25796	5.264	ppbv	98
5) Dichlorodifluoromethane	4.252	85	78142	5.916	ppbv	99
6) Chloromethane	4.395	50	13650	5.218	ppbv	98
7) 1,2-Dichloro-1,1,2,2-t...	4.488	85	58834	6.042	ppbv	94
8) Vinyl chloride	4.600	62	19281	5.396	ppbv	100
9) 1,3-Butadiene	4.723	54	15808	5.407	ppbv	100
10) Bromomethane	4.974	94	22111	5.601	ppbv	100
11) Ethyl chloride	5.128	64	10233	5.401	ppbv	98
12) Ethanol	5.261	45	24898	16.711	ppbv	96
13) Vinyl bromide	5.440	106	35417	4.682	ppbv	99
14) Trichlorofluoromethane	5.804	101	78466	5.415	ppbv	100
15) Acetone	5.701	43	51776	6.210	ppbv	100
16) Isopropyl alcohol	5.937	45	55550	8.725	ppbv	95
17) Acrylonitrile (2-Prope...	6.055	53	20901	7.109	ppbv	97
18) Iodomethane	6.295	142	79785	6.563	ppbv	92
19) 1,1-Dichloroethene	6.352	61	48182	5.289	ppbv	91
20) tert-Butyl alcohol	6.347	59	1493	0.468	ppbv #	53
21) Methylene chloride	6.434	49	36528	5.260	ppbv #	80
22) Allyl chloride	6.536	41	75462	8.668	ppbv #	64
23) 1,1,2-Trichloro-1,2,2-...	6.664	101	66425	5.017	ppbv	99
24) Carbon disulfide	6.721	76	108006	4.948	ppbv	99
25) trans-1,2-Dichloroethe...	7.187	61	50784	4.964	ppbv	91
26) 1,1-Dichloroethane	7.345	63	57139	5.191	ppbv	97
27) MTBE	7.432	73	102033	5.056	ppbv	97
28) Vinyl acetate	7.437	43	103759	5.833	ppbv #	90
29) 2-Butanone (MEK)	7.658	43	71750	5.584	ppbv	89
30) cis-1,2-Dichloroethene...	7.929	61	41860	5.093	ppbv	90
31) Ethyl acetate	8.088	43	150830	6.654	ppbv	98
32) Hexane	8.073	57	59515	5.263	ppbv	94
33) Diisopropyl ether	8.088	43	150830	6.654	ppbv #	94
34) Chloroform	8.124	83	66620	5.230	ppbv	98
35) Tetrahydrofuran	8.446	42	40856	5.782	ppbv	89
36) tert-Butyl ethyl ether...	8.446	59	95371	7.288	ppbv	92
37) 1,2-Dichloroethane	8.610	62	42328	5.303	ppbv	98
38) 1,1,1-Trichloroethane	8.774	97	60974	5.631	ppbv	96
39) Benzene	9.051	78	103439	4.711	ppbv	98
40) Carbon tetrachloride	9.143	117	65895	5.574	ppbv	99
41) Cyclohexane	9.215	56	65146	4.448	ppbv #	83
43) tert-Amyl methyl ether...	9.419	73	88700	8.318	ppbv	96
44) Dibromomethane	9.501	93	35556	8.091	ppbv	97
45) 1,2-Dichloropropane	9.517	63	37482	5.687	ppbv	95
46) Bromodichloromethane	9.619	83	86234	5.929	ppbv	98
47) Trichloroethene	9.645	130	50153	5.134	ppbv	98
48) 1,4-Dioxane	9.660	58	8453	3.064	ppbv #	1
49) Isooctane	9.660	57	192830	6.447	ppbv	95
50) Heptane	9.788	57	37492	5.592	ppbv	83
51) trans-1,3,-Dichloropro...	10.095	75	58636	5.588	ppbv	96
52) cis-1,3-Dichloropropene	10.362	75	53736	5.936	ppbv	96
53) Methyl isobutyl ketone	10.172	43	84663	6.687	ppbv #	95
54) 1,1,2-Trichloroethane	10.464	97	41882	5.191	ppbv	97
55) Toluene	10.608	91	129916	4.241	ppbv	100
56) 2-Hexanone	10.771	43	78878	6.620	ppbv #	98
57) Dibromochloromethane	10.828	129	86657	5.653	ppbv	99

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG07.D
 Acq On : 5 Aug 2017 11:14 am
 Operator : MJB
 Sample : B[H0513-BSD1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

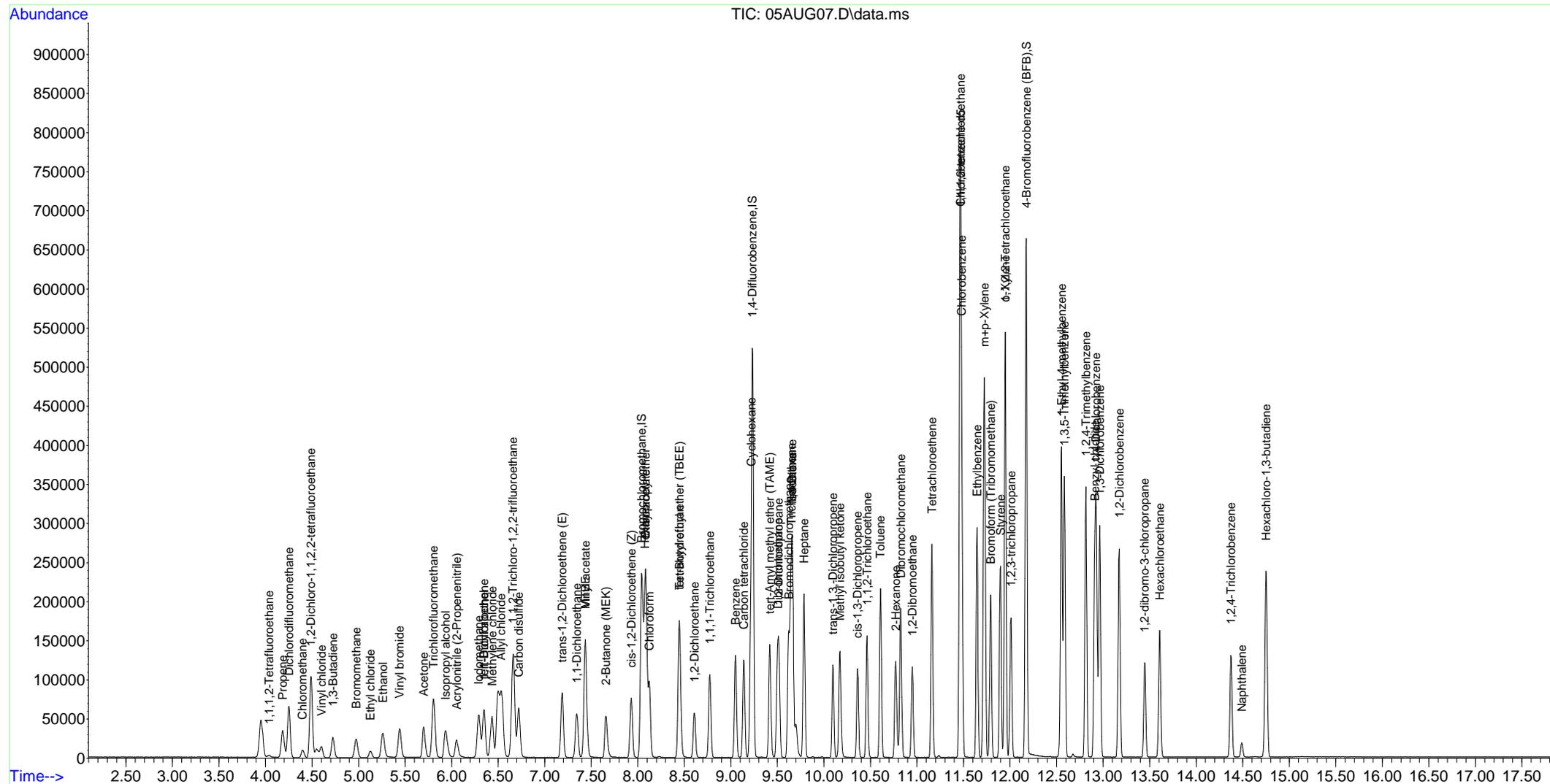
Quant Time: Aug 06 08:28:08 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
58) Tetrachloroethene	11.161	166	68426	5.036	ppbv	98
59) 1,2-Dibromoethane	10.951	107	65442	5.524	ppbv	98
60) Chlorobenzene	11.483	112	110421	5.445	ppbv	98
61) 1,1,1,2-tetrachloroethane	11.473	131	55711	9.167	ppbv #	1
63) Ethylbenzene	11.647	106	56406	4.928	ppbv	99
64) m+p-Xylene	11.724	91	277744	10.888	ppbv	100
65) Bromoform (Tribromomet...	11.791	173	90456	5.252	ppbv	99
66) Styrene	11.898	104	107233	5.391	ppbv #	92
67) 1,1,2,2-Tetrachloroethane	11.944	83	105783	6.970	ppbv	100
68) o-Xylene	11.949	91	145918	5.711	ppbv	98
69) 1,2,3-trichloropropane	12.011	75	67654	12.317	ppbv	98
71) 1-Ethyl-4-methylbenzene	12.554	105	242069	7.331	ppbv	95
72) 1,3,5-Trimethylbenzene	12.584	105	161143	7.227	ppbv	94
73) 1,2,4-Trimethylbenzene	12.815	105	168164	7.386	ppbv	99
74) Benzyl chloride	12.907	91	141772	5.813	ppbv	98
75) 1,3-Dichlorobenzene	12.963	146	100126	10.003	ppbv	98
76) 1,4-Dichlorobenzene	12.928	146	110495	6.854	ppbv	99
77) 1,2-Dichlorobenzene	13.173	146	108808	8.022	ppbv	100
78) 1,2-dibromo-3-chloropr...	13.445	75	30083	23.551	ppbv	96
79) Hexachloroethane	13.609	117	29923	14.039	ppbv	99
80) 1,2,4-Trichlorobenzene	14.377	180	45241	22.416	ppbv	100
81) Naphthalene	14.490	128	17319	7.862	ppbv	98
82) Hexachloro-1,3-butadiene	14.751	225	74153	22.404	ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\2017\AUG2017\AUG05\
 Data File : 05AUG07.D
 Acq On : 5 Aug 2017 11:14 am
 Operator : MJB
 Sample : B[H0513-BSD1
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 08:28:08 2017
 Quant Method : C:\msdchem\1\METHODS\201707\05-1116\MS-TO15.M
 Quant Title : TO-14A / TO-15 Vapor analysis w/ MS-A1
 QLast Update : Wed Jul 12 14:25:41 2017
 Response via : Initial Calibration





Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[H0513

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Air

Prepared using: Air - EPA TO-15

SurrogateUsed: 7D18062

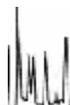
Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720371-01 A	aTO-15v ppbv Full2	8/5/2017 7:53AM	MJB	1	1				1000	
1720371-02 A	aTO-15v ppbv Full2	8/5/2017 7:53AM	MJB	1	1				1000	
1720371-03 A	aTO-15v ppbv Full2	8/5/2017 7:53AM	MJB	1	1				1000	
1720371-04 A	aTO-15v ppbv Full2	8/5/2017 7:53AM	MJB	1	1				1000	
1720405-12 A	aTO-15v ug/m3 Full2	8/5/2017 7:53AM	MJB	1	1				1000	
1720769-01 A	aTO-15v ppbv Full2	8/5/2017 7:53AM	MJB	1	1				1000	
1720769-01RE1 A	aTO-15v ppbv Full2	8/5/2017 7:53AM	MJB	1	1				1000	
1720769-02 A	aTO-15v ppbv Full2	8/5/2017 7:53AM	MJB	1	1				1000	
1720769-03 A	aTO-15v ppbv Full2	8/5/2017 7:53AM	MJB	1	1				1000	
B[H0513-BLK1	QC	8/5/2017 7:53AM	MJB	1	1				1000	
B[H0513-BS1	QC	8/5/2017 7:53AM	MJB	1	1	7F27036		1000	1000	
B[H0513-BSD1	QC	8/5/2017 7:53AM	MJB	1	1	7F27036		1000	1000	

Surrogate Mixes	Description	Solvent	Prepared	Expires
7D18062	TO-14A/TO-15 Working SUR	Solvent Lot #	4/18/2017 by Matthew Borcky	10/18/2017
7F27036	TO-14A / TO-15 A2 Working STD gas Mix 5ppbv Q(Solvent Lot #	6/27/2017 by Matthew Borcky	12/26/2017

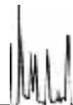


Laboratories, Inc.

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Raw Data - Sequence Information



ANALYSIS SEQUENCE

1711838

Instrument: MS-A1

Calibration ID: 1707005

Sequence Date: 07/05/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1711838-TUN1	QC		1		7D18063		
1711838-CAL1	QC		2		7G05026		
1711838-CAL2	QC		3		7G05027		
1711838-CAL3	QC		4		7G05028		
1711838-CAL4	QC		5		7G05029		
1711838-CAL5	QC		6		7G05030		
1711838-CAL6	QC		7		7G05031		
1711838-ICV1	QC		8		7G05032		
1711838-ICB1	QC		9		7D18064		



ANALYSIS SEQUENCE

1713858

Instrument: MS-A1

Calibration ID: 1707005

Sequence Date: 08/05/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713858-TUN1	QC		1		7D18063		
1713858-CCV1	QC		2		7F15054		
1713858-CCV2	QC		3		7G17058		
1713858-CCB1	QC		4		7D18064		
B[H0513-BLK1	QC		5			7D18059	
B[H0513-BS1	QC		6			7D18059	
B[H0513-BSD1	QC		7			7D18059	
1720769-01	aTO-15v ppbv Full2	A	8			7D18059	Full List + TPHg
1720769-02	aTO-15v ppbv Full2	A	9			7D18059	Full List + TPHg
1720769-03	aTO-15v ppbv Full2	A	10			7D18059	Full List + TPHg
1720371-01	aTO-15v ppbv Full2	A	11			7D18059	PCE,TCE,cis-1-2DCE,trans-1,2DC E,vinyl chloride,IPA
1720371-02	aTO-15v ppbv Full2	A	12			7D18059	PCE,TCE,cis-1-2DCE,trans-1,2DC E,vinyl chloride,IPA
1720371-03	aTO-15v ppbv Full2	A	13			7D18059	PCE,TCE,cis-1-2DCE,trans-1,2DC E,vinyl chloride,IPA
1720371-04	aTO-15v ppbv Full2	A	14			7D18059	PCE,TCE,cis-1-2DCE,trans-1,2DC E,vinyl chloride,IPA
1720769-01RE1	aTO-15v ppbv Full2	A	15			7D18059	Full List + TPHg
1720405-12	aTO-15v ug/m3 Full2	A	16			7D18059	Vinyl Chloride only



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20405
Class: WET
Method: EPA-120.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE
EPA-120.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Client Sample Id:

Lab Sample Id:

28SW02_170725

1720405-07

28SW03_170725

1720405-08

28SW08_170725

1720405-09

DUP09_170725

1720405-11

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: Sara Guron

Date: 08-25-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS

EPA-120.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: MET-1

Analyte	DL	LOD	LOQ	Units
Electrical Conductivity @ 25 C	1	1	1	umhos/cm



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-120.1

28SW02_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-07

File ID: Tiamo072817-066

Sampled: 07/25/17 08:16

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 14:18

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2117

Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (umhos/cm)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Electrical Conductivity @ 25 C	24400	1.00	1.00	1.00	1		EPA-120.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-120.1

28SW03_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-08

File ID: Tiamo072817-068

Sampled: 07/25/17 08:15

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 14:27

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2117

Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (umhos/cm)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Electrical Conductivity @ 25 C	23400	1.00	1.00	1.00	1		EPA-120.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-120.1

28SW08_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-09

File ID: Tiamo072817-070

Sampled: 07/25/17 08:18

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 14:36

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2117

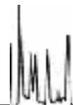
Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (umhos/cm)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Electrical Conductivity @ 25 C	41200	1.00	1.00	1.00	1		EPA-120.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-120.1

DUP09_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-11

File ID: Tiamo072817-072

Sampled: 07/25/17 08:20

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 14:43

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2117

Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (umhos/cm)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Electrical Conductivity @ 25 C	23500	1.00	1.00	1.00	1		EPA-120.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY

EPA-120.1

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Batch: B[G2117 Batch Matrix: Water Preparation: No Prep

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
28SW02_170725	1720405-07	Tiamo072817-066	07/28/17 08:30	
28SW03_170725	1720405-08	Tiamo072817-068	07/28/17 08:30	
28SW08_170725	1720405-09	Tiamo072817-070	07/28/17 08:30	
DUP09_170725	1720405-11	Tiamo072817-072	07/28/17 08:30	
LCS	B[G2117-BS1	Tiamo072817-057	07/28/17 08:30	
27EW-18_170725	B[G2117-DUP1	Tiamo072817-062	07/28/17 08:30	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES

27EW-18 170725

EPA-120.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2117-DUP1

Batch: B[G2117

Lab Source ID: 1720405-06

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Source Sample Name: 27EW-18 170725

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (umhos/cm)	C	DUPLICATE CONCENTRATION (umhos/cm)	C	RPD %	Q	METHOD
Electrical Conductivity @ 25 C	10	296.40		296.50		0.0337		EPA-120.1

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
EPA-120.1

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2117 Laboratory ID: B[G2117-BS1
Preparation: No Prep Initial/Final: 50 ml / 50 ml

COMPOUND	SPIKE ADDED (umhos/cm)	LCS CONCENTRATION (umhos/cm)	LCS % REC. #	QC LIMITS REC.
Electrical Conductivity @ 25 C	303.00	321.30	106	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-120.1

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713473</u>	Instrument:	<u>MET-1</u>
Matrix:	<u>Water</u>	Calibration:	<u>UNASSIGNED</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713473-ICV1	Tiamo072817-002	07/28/17 08:34
LCS	B[G2117-BS1	Tiamo072817-057	07/28/17 13:41
27EW-18_170725	B[G2117-DUP1	Tiamo072817-062	07/28/17 14:03
28SW02_170725	1720405-07	Tiamo072817-066	07/28/17 14:18
28SW03_170725	1720405-08	Tiamo072817-068	07/28/17 14:27
28SW08_170725	1720405-09	Tiamo072817-070	07/28/17 14:36
DUP09_170725	1720405-11	Tiamo072817-072	07/28/17 14:43



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-120.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Instrument ID: MET-1

Calibration: UNASSIGNED

Control Limit: +/- %

Sequence: 1713473

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713473-ICV1	Electrical Conductivity @ 25 C	1003.0	1007.7	100	umhos/cm	EPA-120.1

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

HOLDING TIME SUMMARY
EPA-120.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
28SW02_170725	07/25/17 08:16	07/25/17 22:20	07/28/17 08:30	3.00	28.00	07/28/17 14:18	3.00	28.00	
28SW03_170725	07/25/17 08:15	07/25/17 22:20	07/28/17 08:30	3.00	28.00	07/28/17 14:27	3.00	28.00	
28SW08_170725	07/25/17 08:18	07/25/17 22:20	07/28/17 08:30	3.00	28.00	07/28/17 14:36	3.00	28.00	
DUP09_170725	07/25/17 08:20	07/25/17 22:20	07/28/17 08:30	3.00	28.00	07/28/17 14:43	3.00	28.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



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Raw Data From Instrument MET-1



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Analytical Runs



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
EC Calibration									
Determination start	2017-07-28 08:30:33	(24.0 °C)							
	1413								
Method. BCL-CAL Cond.									
ICV1 @COND									
Determination start	2017-07-28 08:34:48	(23.8 °C)							
	1007.70								
Method. BCL-Cond									
B1-BS1 @COND									
Determination start	2017-07-28 08:36:26	(23.8 °C)							
	318.30								
Method. BCL-Cond									
pH Calibration									
Determination start	2017-07-28 08:38:00								
Method. BCL-CAL-pH-5 BUFFERS									
B1-BS2 @pH									
Determination start	2017-07-28 08:54:13	(25.0 °C)							
	7.02								
Method. BCL-pH									
B1-BS3 @Alk									
Determination start	2017-07-28 08:57:23	(23.6 °C)							
	219.00	(24.9 °C)	10.21	0.500	1.246	0.00	76.07	18.71	94.78
Titer 0.076									
Method. BCL-Cond-pH-Alk									
B1-BLK1 @Alk									
Determination start	2017-07-28 09:03:08	(23.2 °C)							
	2.00	(24.7 °C)	4.77	0.000	0.016	0.00	0.00	1.22	1.22
Titer 0.076									
Method. BCL-Cond-pH-Alk-BLK1									
STD NAOH									
Determination start	2017-07-28 09:08:17								
Titer 0.05508									
Method. BCL-STDIZE-NAOH									
1720715-02@B									
Determination start	2017-07-28 09:12:42	(18.2 °C)							
	408.20	(22.1 °C)	6.55	0.000	1.194	0.00	0.00	90.82	90.82
Titer 0.076									
Method. BCL-Cond-pH-Alk									
. 2017-07-28 09:19:22									



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start (18.9 °C) (22.2 °C)									
1720715-02@B	50	408.30	6.57	0.000	1.170	0.00	0.00	89.00	89.00
Determination start 2017-07-28 09:25:52 (19.1 °C) (22.3 °C)									
B1-DUP1	50	408.70	6.57	0.000	1.172	0.00	0.00	89.15	89.15
Determination start 2017-07-28 09:32:21 (19.5 °C) (23.2 °C)									
1720715-01@B	25	3101.70	5.08	0.000	0.894	0.00	0.00	136.01	136.01
Determination start 2017-07-28 09:38:37 (23.9 °C)									
BLK1		11.60							
Determination start 2017-07-28 09:40:19 (20.7 °C) (23.3 °C)									
1720671-01@A	50	310.80	8.03	0.000	0.924	0.00	0.00	70.29	70.29
Determination start 2017-07-28 09:46:19 (21.4 °C) (23.7 °C)									
1720671-02@A	50	233.90	7.23	0.000	0.802	0.00	0.00	61.01	61.01
Determination start 2017-07-28 09:51:41 (21.7 °C) (23.9 °C)									
1720671-03@A	50	241.40	7.01	0.000	0.758	0.00	0.00	57.66	57.66
Determination start 2017-07-28 09:56:55 (22.0 °C) (24.1 °C)									
1720672-01@A	50	317.80	7.94	0.000	0.664	0.00	0.00	50.51	50.51
Determination start 2017-07-28 10:02:52 (22.1 °C) (24.2 °C)									
1720672-02@A	50	323.10	7.54	0.000	0.762	0.00	0.00	57.96	57.96



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 10:08:14									
		(22.3 °C)	(24.2 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720672-03@A	50	321.80	7.61	0.000	0.734	0.00	0.00	55.83	55.83
Determination start 2017-07-28 10:13:31									
		(22.3 °C)	(24.2 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720666-01@D	50	716.50	7.99	0.000	1.728	0.00	0.00	131.44	131.44
Determination start 2017-07-28 10:19:16									
		(22.7 °C)	(24.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720690-01@A	50	367.20	9.21	0.158	0.808	0.00	24.04	37.42	61.46
Determination start 2017-07-28 10:25:36									
		(23.3 °C)					Method.	BCL-Cond	
B2-BS1 @COND		318.30							
Determination start 2017-07-28 10:27:19									
		(25.1 °C)					Method.	BCL-pH	
B2-BS2@PH		7.02							
Determination start 2017-07-28 10:30:43									
		(23.5 °C)	(25.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B2-BS3@ALK	50	205.40	10.08	0.414	1.206	0.00	62.98	28.75	91.74
Determination start 2017-07-28 10:36:31									
		(23.3 °C)	(24.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk-BLK1	
B2-BLK1	50	1.60	4.69	0.000	0.010	0.00	0.00	0.76	0.76
Determination start 2017-07-28 10:41:39									
		(22.6 °C)	(24.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720690-01@ARE1	50	364.30	9.35	0.208	0.858	0.00	31.64	33.62	65.26
Determination start 2017-07-28 10:53:39									
					Titer	0.04918	Method.	BCL-STDIZE-NAOH	
STD NAOH									



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
1720385-01@D	25	2017-07-28 11:00:51 (25.3 °C) 7.76		0.124		0.0492		Method. BCL-CO2-25 ML	
1720385-01@D	25	2017-07-28 11:05:45 (25.3 °C) 7.78		0.118		0.0492		Method. BCL-CO2-25 ML	
B1-DUP1	25	2017-07-28 11:10:42 (25.2 °C) 7.78		0.120		0.0492		Method. BCL-CO2-25 ML	
1720386-01@D	25	2017-07-28 11:15:39 (25.2 °C) 7.17		7.088		0.0492		Method. BCL-CO2-25 ML	
1720387-01@D	25	2017-07-28 11:57:08 (25.8 °C) 7.62		0.362		0.0492		Method. BCL-CO2-25 ML	
1720388-01@D	25	2017-07-28 12:02:32 (25.5 °C) 7.66		0.228		0.0492		Method. BCL-CO2-25 ML	
1720389-01@D	25	2017-07-28 12:07:37 (25.4 °C) 7.70		0.260		0.0492		Method. BCL-CO2-25 ML	
1720390-01@D	25	2017-07-28 12:12:48 (25.8 °C) 9.67		0.000		0.0492		Method. BCL-CO2-25 ML	
1720313-08@H	50	2017-07-28 12:17:00 (20.7 °C) 649.50 7.60		3.442		0.076	0.000	Method. BCL-Cond-pH-Alk	261.82



..... Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 12:23:46									
		(20.9 °C)	(23.7 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B2-DUP1	50	648.90	7.46	0.000	3.234	0.00	0.00	246.00	246.00
Determination start 2017-07-28 12:30:00									
		(26.5 °C)					Method.	BCL-Cond	
BLK1		4.40							
Determination start 2017-07-28 12:31:42									
		(21.6 °C)	(24.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720313-09@G	50	648.00	7.35	0.000	3.192	0.00	0.00	242.80	242.80
Determination start 2017-07-28 12:37:50									
		(26.1 °C)					Method.	BCL-Cond	
BLK1		4.40							
Determination start 2017-07-28 12:39:32									
		(22.0 °C)	(24.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720331-01@Y	25	6610.30	7.36	0.000	0.526	0.00	0.00	80.02	80.02
Determination start 2017-07-28 12:45:16									
		(26.0 °C)					Method.	BCL-Cond	
BLK1		14.00							
Determination start 2017-07-28 12:47:17									
		(22.1 °C)	(25.2 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720331-02@Y	25	3894.40	7.22	0.000	1.186	0.00	0.00	180.43	180.43
Determination start 2017-07-28 12:53:12									
		(25.8 °C)					Method.	BCL-Cond	
BLK1		11.70							
Determination start 2017-07-28 12:55:12									
		(22.6 °C)	(25.4 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720332-01@Y	25	5943.60	7.37	0.000	0.494	0.00	0.00	75.15	75.15



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-28 13:01:00 (25.7 °C) 14.60 Method. BCL-Cond								
1720332-02@Y	25	4537.30	7.22 (25.7 °C)	0.000	1.860	0.00	0.00	282.97	282.97
BLK1	Determination start 2017-07-28 13:03:01 (23.0 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
1720332-03@Y	25	5386.30	7.50 (25.9 °C)	0.000	1.230	0.00	0.00	187.12	187.12
BLK1	Determination start 2017-07-28 13:17:17 (25.4 °C) 15.80 Method. BCL-Cond								
1720361-01@C	25	1480.90	8.39 (25.8 °C)	0.030	0.874	0.00	9.13	123.84	132.96
BLK1	Determination start 2017-07-28 13:19:17 (23.2 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
1720405-03@H	25	2268.90	6.92 (25.7 °C)	0.000	1.046	0.00	0.00	159.13	159.13
BLK1	Determination start 2017-07-28 13:26:53 (25.3 °C) 9.40 Method. BCL-Cond								
1720405-03@H	25	2268.90	6.92 (25.7 °C)	0.000	1.046	0.00	0.00	159.13	159.13
BLK1	Determination start 2017-07-28 13:32:33 (25.2 °C) 11.50 Method. BCL-Cond								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 13:34:14									
		(23.8 °C)	(26.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-04@H	50	696.20	7.71	0.000	3.062	0.00	0.00	232.91	232.91
Determination start 2017-07-28 13:40:08									
		(25.2 °C)					Method.	BCL-Cond	
BLK1		9.30							
Determination start 2017-07-28 13:41:46									
		(24.5 °C)					Method.	BCL-Cond	
B3-BS1@COND		321.30							
Determination start 2017-07-28 13:43:25									
		(26.7 °C)					Method.	BCL-pH	
B3-BS2@PH		7.01							
Determination start 2017-07-28 13:46:50									
		(24.7 °C)	(26.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B3-BS3@ALK	50	198.60	9.84	0.324	1.232	0.00	49.29	44.42	93.71
Determination start 2017-07-28 13:52:37									
		(24.4 °C)	(26.7 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk-BLK1	
B3-BLK1	50	1.80	4.96	0.000	0.024	0.00	0.00	1.83	1.83
Determination start 2017-07-28 13:58:05									
		(24.1 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-06@G	50	296.40	7.95	0.000	1.378	0.00	0.00	104.82	104.82
Determination start 2017-07-28 14:03:34									
		(24.1 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B3-DUP1	50	296.50	7.96	0.000	1.364	0.00	0.00	103.75	103.75
Determination start 2017-07-28 14:09:02									
		(25.2 °C)					Method.	BCL-Cond	
BLK1		9.10							



Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 14:10:43									
		(24.1 °C)	(26.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-05@G	25	2900.60	7.10	0.000	2.146	0.00	0.00	326.48	326.48
Determination start 2017-07-28 14:16:35									
		(25.1 °C)					Method.	BCL-Cond	
BLK1		13.70							
Determination start 2017-07-28 14:18:17									
		(24.3 °C)	(27.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-07@A	25	24353.30	7.71	0.000	3.790	0.00	0.00	576.58	576.58
Determination start 2017-07-28 14:25:08									
		(25.3 °C)					Method.	BCL-Cond	
BLK1		23.70							
Determination start 2017-07-28 14:27:10									
		(24.3 °C)	(27.1 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-08@A	25	23411.60	8.09	0.000	5.068	0.00	0.00	771.01	771.01
Determination start 2017-07-28 14:34:03									
		(25.3 °C)					Method.	BCL-Cond	
BLK1		27.00							
Determination start 2017-07-28 14:36:04									
		(24.1 °C)	(27.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-09@A	25	41151.80	7.60	0.000	1.002	0.00	0.00	152.44	152.44
Determination start 2017-07-28 14:41:50									
		(25.3 °C)					Method.	BCL-Cond	
BLK1		35.00							
Determination start 2017-07-28 14:43:52									
		(24.2 °C)	(27.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-11@A	25	23490.60	8.10	0.000	5.072	0.00	0.00	771.62	771.62



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-28 14:50:47 (25.3 °C) 30.40 Method. BCL-Cond								
1720405-13@G	25	1435.90	7.69 (26.9 °C)	0.000	1.712	0.00	0.00	260.45	260.45
BLK1	Determination start 2017-07-28 14:52:48 (24.1 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
1720405-14@G	25	1150.80	7.39 (26.9 °C)	0.000	1.036	0.00	0.00	157.61	157.61
BLK1	Determination start 2017-07-28 15:00:07 (24.1 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 15:05:36 (25.3 °C) 19.20 Method. BCL-Cond								
1720405-15@G	25	1190.40	6.71 (26.9 °C)	0.000	0.576	0.00	0.00	87.63	87.63
BLK1	Determination start 2017-07-28 15:07:18 (24.3 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 15:13:04 (25.3 °C) 18.80 Method. BCL-Cond								
1720405-17@G	50	510.50	8.18 (26.5 °C)	0.000	1.194	0.00	0.00	90.82	90.82
BLK1	Determination start 2017-07-28 15:14:46 (24.3 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 15:20:12 (25.2 °C) 17.90 Method. BCL-Cond								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 15:21:51 (24.4 °C) 324.40									
B4-BS1@COND									
Determination start 2017-07-28 15:23:44 (26.8 °C) 7.01									
B4-BS2@PH									
Determination start 2017-07-28 15:27:12 (24.4 °C) (26.6 °C)									
B4-BS3@ALK	50	200.50	9.92	0.350	1.214	0.00	53.25	39.10	92.34
Determination start 2017-07-28 15:32:58 (24.6 °C) (26.6 °C)									
B4-BLK1	50	1.30	5.02	0.000	0.024	0.00	0.00	1.83	1.83
Determination start 2017-07-28 15:38:27 (24.3 °C) (26.5 °C)									
1720444-01@D	50	730.40	8.03	0.000	2.582	0.00	0.00	196.40	196.40
Determination start 2017-07-28 15:44:19 (24.3 °C) (26.4 °C)									
B4-DUP1	50	729.60	8.04	0.000	2.566	0.00	0.00	195.19	195.19
Determination start 2017-07-28 15:50:12 (27.7 °C) 1.40									
BLK1									
Determination start 2017-07-28 15:51:54 (24.5 °C) (26.9 °C)									
1720406-01@A	25	2014.80	8.19	0.000	5.810	0.00	0.00	883.89	883.89
Determination start 2017-07-28 15:58:34 (27.2 °C) 3.00									
BLK1									



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 16:00:30									
		(24.7 °C)	(26.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720408-01@A	25	1121.40	6.07	0.000	1.446	0.00	0.00	219.98	219.98
Determination start 2017-07-28 16:06:46									
		(26.7 °C)	1.80				Method.	BCL-Cond	
BLK1									
Determination start 2017-07-28 16:08:27									
		(24.5 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720411-01@A	50	973.80	5.65	0.000	3.752	0.00	0.00	285.40	285.40
Determination start 2017-07-28 16:17:58									
		(26.4 °C)	2.10				Method.	BCL-Cond	
BLK1									
Determination start 2017-07-28 16:19:40									
		(24.4 °C)	(26.3 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720415-01@D	50	593.10	9.49	0.566	2.238	0.00	86.11	84.13	170.24
Determination start 2017-07-28 16:26:01									
		(26.1 °C)	2.40				Method.	BCL-Cond	
BLK1									
Determination start 2017-07-28 16:27:43									
		(24.3 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720448-01@A	25	1053.80	7.51	0.000	1.428	0.00	0.00	217.25	217.25
Determination start 2017-07-28 16:33:41									
		(26.0 °C)	1.90				Method.	BCL-Cond	
BLK1									
Determination start 2017-07-28 16:35:22									
		(24.3 °C)	(26.3 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720448-02@A	50	802.50	7.96	0.000	1.714	0.00	0.00	130.38	130.38



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-28 16:40:56 (25.9 °C) 2.00								
1720455-01@A	25	1194.50	5.84 (24.5 °C)	0.000	1.562	0.00	0.00	237.63	237.63
	Determination start 2017-07-28 16:42:37 (26.8 °C) 0.076								
BLK1	Determination start 2017-07-28 16:49:05 (25.7 °C) 3.10								
1720481-01@A	50	739.40	7.18 (24.9 °C)	0.000	2.622	0.00	0.00	199.45	199.45
	Determination start 2017-07-28 16:50:46 (26.6 °C) 0.076								
BLK1	Determination start 2017-07-28 16:57:06 (30.9 °C) 0.90								
1720483-01@D	50	619.10	8.00 (25.3 °C)	0.000	1.554	0.00	0.00	118.21	118.21
	Determination start 2017-07-28 16:58:48 (26.6 °C) 0.076								
BLK1	Determination start 2017-07-28 17:04:15 (30.0 °C) 1.40								
B5-BS1 @COND	Determination start 2017-07-28 17:05:53 (25.5 °C) 326.70								
B5-BS2@PH	Determination start 2017-07-28 17:07:27 (26.9 °C) 7.01								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 17:10:46									
		(25.0 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B5-BS3@ALK	50	205.80	10.00	0.396	1.236	0.00	60.24	33.77	94.02
Determination start 2017-07-28 17:16:28									
		(25.1 °C)	(26.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk-BLK1	
B5-BLK1	50	1.60	4.73	0.000	0.014	0.00	0.00	1.06	1.06
Determination start 2017-07-28 17:21:41									
		(25.1 °C)	(26.7 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720498-01@A	50	25.00	7.01	0.000	0.174	0.00	0.00	13.24	13.24
Determination start 2017-07-28 17:27:13									
		(24.8 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B5-DUP1	50	25.60	7.06	0.000	0.172	0.00	0.00	13.08	13.08
Determination start 2017-07-28 17:31:56									
		(27.7 °C)					Method.	BCL-Cond	
BLK1		0.60							
Determination start 2017-07-28 17:33:38									
		(25.0 °C)	(26.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720488-01@I	25	45072.80	7.68	0.000	19.232	0.00	0.00	2925.81	2925.81
Determination start 2017-07-28 17:44:42									
		(27.2 °C)					Method.	BCL-Cond	
BLK1		17.20							
Determination start 2017-07-28 17:46:44									
		(25.0 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720495-01@A	50	67.60	7.21	0.000	0.294	0.00	0.00	22.36	22.36
Determination start 2017-07-28 17:51:53									
		(26.7 °C)					Method.	BCL-Cond	
BLK1		5.80							



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
1720496-01@A	50	52.40 (24.8 °C) 2017-07-28 17:53:36 (26.5 °C)	7.12	0.000	0.210	0.00	0.00	15.97	15.97
BLK1	Determination start 2017-07-28 17:58:45 (26.5 °C) 6.20 Method. BCL-Cond								
1720497-01@A	50	167.00 (24.8 °C) 2017-07-28 18:00:26 (26.4 °C)	8.42	0.028	0.552	0.00	4.26	37.73	41.99
BLK1	Determination start 2017-07-28 18:06:26 (26.2 °C) 6.40 Method. BCL-Cond								
1720505-01@D	25	21171.30 (24.8 °C) 2017-07-28 18:08:08 (26.7 °C)	7.30	0.000	4.630	0.00	0.00	704.37	704.37
BLK1	Determination start 2017-07-28 18:14:52 (26.1 °C) 18.40 Method. BCL-Cond								
1720505-02@D	25	18166.90 (24.8 °C) 2017-07-28 18:16:54 (26.8 °C)	7.56	0.000	5.344	0.00	0.00	813.00	813.00
BLK1	Determination start 2017-07-28 18:23:35 (25.9 °C) 19.10 Method. BCL-Cond								
1720505-03@D	25	19269.30 (24.7 °C) 2017-07-28 18:25:36 (26.7 °C)	7.49	0.000	4.702	0.00	0.00	715.33	715.33
	Determination start 2017-07-28 18:25:36 (26.7 °C) 7.49 Method. BCL-Cond-pH-Alk								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-28 18:32:09 (25.8 °C) 19.80 Method. BCL-Cond								
1720505-04@D	25	18592.30	7.56 (26.7 °C)	0.000	5.470	0.00	0.00	832.16	832.16
	Determination start 2017-07-28 18:34:10 (24.6 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 18:41:05 (25.7 °C) 20.30 Method. BCL-Cond								
1720505-05@D	25	37743.60	7.86 (26.7 °C)	0.000	18.044	0.00	0.00	2745.08	2745.08
	Determination start 2017-07-28 18:43:07 (24.7 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 18:52:56 (25.6 °C) 26.20 Method. BCL-Cond								
B6-BS1@COND	Determination start 2017-07-28 18:54:55 (24.6 °C) 329.00 Method. BCL-Cond								
B6-BS2@PH	Determination start 2017-07-28 18:56:39 (26.5 °C) 7.00 Method. BCL-pH								
B6-BS3@ALK	50	197.30	9.88 (26.3 °C)	0.332	1.206	0.00	50.51	41.23	91.74
	Determination start 2017-07-28 19:00:07 (24.4 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
B6-BLK1	50	3.20	4.93 (26.3 °C)	0.000	0.022	0.00	0.00	1.67	1.67
	Determination start 2017-07-28 19:06:02 (24.3 °C) Titer 0.076 Method. BCL-Cond-pH-Alk-BLK1								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
1720550-05@A	Determination start 2017-07-28 19:11:34 (24.4 °C) 859.30	7.57	0.000	2.238	0.00	0.076	Method.	BCL-Cond-pH-Alk	170.24
B6-DUP1	Determination start 2017-07-28 19:18:14 (24.3 °C) 861.50	7.54	0.000	2.226	0.00	0.076	Method.	BCL-Cond-pH-Alk	169.32
1720617-01@A	Determination start 2017-07-28 19:24:40 (24.3 °C) 418.30	7.94	0.000	0.968	0.00	0.076	Method.	BCL-Cond-pH-Alk	73.63
1720632-01@A	Determination start 2017-07-28 19:30:04 (24.3 °C) 264.60	6.86	0.000	0.860	0.00	0.076	Method.	BCL-Cond-pH-Alk	65.42
10000	Determination start 2017-07-28 19:35:38 (24.2 °C) 10101.30						Method.	BCL-Cond	
303	Determination start 2017-07-28 19:37:35 (24.4 °C) 331.80						Method.	BCL-Cond	
7.00	Determination start 2017-07-28 19:39:19 (26.3 °C) 7.00						Method.	BCL-pH	



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2117

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720405-05 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-06 G	i120.1w EC	7/28/2017 8:30AM		50	50					
1720405-06 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-07 A	i120.1w EC	7/28/2017 8:30AM	RML	50	50					
1720405-08 A	i120.1w EC	7/28/2017 8:30AM	RML	50	50					
1720405-09 A	i120.1w EC	7/28/2017 8:30AM	RML	50	50					
1720405-11 A	i120.1w EC	7/28/2017 8:30AM	RML	50	50					
1720405-13 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-14 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-15 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-17 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
B[G2117-BLK1	QC	7/28/2017 8:30AM	RML	50	50					
B[G2117-BS1	QC	7/28/2017 8:30AM	RML	50	50	7G27012		50000		
B[G2117-BS2	QC	7/28/2017 8:30AM	RML	50	50	7G11062		50000		
B[G2117-BS3	QC	7/28/2017 8:30AM	RML	50	50	7G27013		5000		
B[G2117-DUP1	QC	7/28/2017 8:30AM	RML	50	50		1720405-06			

Spike Mixes	Description	Solvent	Prepared	Expires
7G11062	pH 7 LCSW Check	H2O	7/11/2017 by ** Vendor **	2/28/2019
7G27012	EC LCSW WORKING	H2O (DI)	7/26/2017 by Rosa Ledesma	1/26/2018
7G27013	ALK NA2CO3	H2O	5/31/2017 by Rosa Ledesma	10/31/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713473

Instrument: MET-1

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713473-ICV1	QC		1		7B07020		
B[G2116-BS1	QC		2				
B[G2116-BS2	QC		3				
B[G2116-BS3	QC		4				
B[G2116-BLK1	QC		5				
1720313-08	i150.1w pH	H	6				BatchQC
1720313-08	i310.1w Tot Alk as CaCO3	H	6				
1720313-08	iSM2320Bw CO3	H	6				BatchQC
1720313-08	iSM2320Bw HCO3	H	6				BatchQC
1720313-08	iSM2320Bw OH	H	6				BatchQC
1720313-08	ISM2510Bw EC	H	6				BatchQC
B[G2116-DUP1	QC		7				
1720313-09	i310.1w Tot Alk as CaCO3	G	8				
1720331-01	i150.1w pH	N	9				
1720331-01	iSM2320Bw CO3	N	9				
1720331-01	iSM2320Bw HCO3	N	9				
1720331-01	iSM2320Bw OH	N	9				
1720331-02	i150.1w pH	N	10				
1720331-02	iSM2320Bw CO3	N	10				
1720331-02	iSM2320Bw HCO3	N	10				
1720331-02	iSM2320Bw OH	N	10				
1720332-01	i150.1w pH	N	11				
1720332-01	iSM2320Bw CO3	N	11				
1720332-01	iSM2320Bw HCO3	N	11				
1720332-01	iSM2320Bw OH	N	11				
1720332-02	i150.1w pH	N	12				
1720332-02	iSM2320Bw CO3	N	12				
1720332-02	iSM2320Bw HCO3	N	12				
1720332-02	iSM2320Bw OH	N	12				
1720332-03	i150.1w pH	N	13				
1720332-03	iSM2320Bw CO3	N	13				
1720332-03	iSM2320Bw HCO3	N	13				
1720332-03	iSM2320Bw OH	N	13				
1720361-01	i150.1w pH	C	14				
1720361-01	iSM2320Bw CO3	C	14				
1720361-01	iSM2320Bw HCO3	C	14				
1720361-01	iSM2320Bw OH	C	14				
1720361-01	ISM2510Bw EC	C	14				
1720405-03	i310.1w Tot Alk as CaCO3	G	15				



ANALYSIS SEQUENCE

1713473

Instrument: MET-1

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720405-04	i310.1w Tot Alk as CaCO3	G	16				
B[G2117-BS1	QC		17				
B[G2117-BS2	QC		18				
B[G2117-BS3	QC		19				
B[G2117-BLK1	QC		20				
1720405-06	i120.1w EC	G	21				BatchQC
1720405-06	i310.1w Tot Alk as CaCO3	G	21				
B[G2117-DUP1	QC		22				
1720405-05	i310.1w Tot Alk as CaCO3	G	23				
1720405-07	i120.1w EC	A	24				
1720405-08	i120.1w EC	A	25				
1720405-09	i120.1w EC	A	26				
1720405-11	i120.1w EC	A	27				
1720405-13	i310.1w Tot Alk as CaCO3	G	28				
1720405-14	i310.1w Tot Alk as CaCO3	G	29				
1720405-15	i310.1w Tot Alk as CaCO3	G	30				
1720405-17	i310.1w Tot Alk as CaCO3	G	31				
B[G2118-BS1	QC		32				
B[G2118-BS2	QC		33				
B[G2118-BS3	QC		34				
B[G2118-BLK1	QC		35				
1720444-01	i120.1w EC	D	36				
1720444-01	i150.1w pH	D	36				
1720444-01	i310.1w CO3	D	36				
1720444-01	i310.1w HCO3	D	36				
1720444-01	i310.1w OH	D	36				
1720444-01	ISM2510Bw EC	D	36				BatchQC
B[G2118-DUP1	QC		37				
1720406-01	i120.1w EC	B	38				
1720406-01	i150.1w pH	B	38				
1720408-01	i120.1w EC	A	39				
1720411-01	ISM2510Bw EC	A	40				
1720415-01	i120.1w EC	D	41				
1720415-01	i150.1w pH	D	41				
1720448-01	i120.1w EC	A	42				
1720448-02	i120.1w EC	A	43				
1720455-01	i120.1w EC	A	44				
1720481-01	i120.1w EC	A	45				
1720481-01	i150.1w pH	A	45				



ANALYSIS SEQUENCE

1713473

Instrument: MET-1

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720483-01	i120.1w EC	D	46				
1720483-01	i150.1w pH	D	46				
1720483-01	i310.1w CO3	D	46				
1720483-01	i310.1w HCO3	D	46				
1720483-01	i310.1w OH	D	46				
B[G2119-BS1	QC		47				
B[G2119-BS2	QC		48				
B[G2119-BS3	QC		49				
B[G2119-BLK1	QC		50				
1720498-01	i150.1w pH	A	51				
1720498-01	iSM2320Bw CO3	A	51				
1720498-01	iSM2320Bw CO3 Alk as CaCO3	A	51				BatchQC
1720498-01	iSM2320Bw HCO3	A	51				
1720498-01	iSM2320Bw HCO3 Alk as CaCC	A	51				BatchQC
1720498-01	iSM2320Bw OH	A	51				
1720498-01	iSM2320Bw OH Alk as CaCO3	A	51				BatchQC
1720498-01	iSM2320Bw Tot Alk as CaCO3	A	51				BatchQC
1720498-01	ISM2510Bw EC	A	51				
B[G2119-DUP1	QC		52				
1720488-01	i150.1w pH	I	53				
1720488-01	iSM2320Bw CO3 Alk as CaCO3	I	53				
1720488-01	iSM2320Bw HCO3 Alk as CaCC	I	53				
1720488-01	iSM2320Bw OH Alk as CaCO3	I	53				
1720488-01	iSM2320Bw Tot Alk as CaCO3	I	53				
1720495-01	i150.1w pH	A	54				
1720495-01	iSM2320Bw CO3	A	54				
1720495-01	iSM2320Bw HCO3	A	54				
1720495-01	iSM2320Bw OH	A	54				
1720495-01	ISM2510Bw EC	A	54				
1720496-01	i150.1w pH	A	55				
1720496-01	iSM2320Bw CO3	A	55				
1720496-01	iSM2320Bw HCO3	A	55				
1720496-01	iSM2320Bw OH	A	55				
1720496-01	ISM2510Bw EC	A	55				
1720497-01	i150.1w pH	A	56				
1720497-01	iSM2320Bw CO3	A	56				
1720497-01	iSM2320Bw HCO3	A	56				
1720497-01	iSM2320Bw OH	A	56				
1720497-01	ISM2510Bw EC	A	56				



ANALYSIS SEQUENCE

1713473

Instrument: MET-1

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720505-01	iSM2320Bw CO3 Alk as CaCO3	D	57				
1720505-01	iSM2320Bw HCO3 Alk as CaCC	D	57				
1720505-01	iSM2320Bw OH Alk as CaCO3	D	57				
1720505-01	ISM2510Bw EC	D	57				
1720505-02	iSM2320Bw CO3 Alk as CaCO3	D	58				
1720505-02	iSM2320Bw HCO3 Alk as CaCC	D	58				
1720505-02	iSM2320Bw OH Alk as CaCO3	D	58				
1720505-02	ISM2510Bw EC	D	58				
1720505-03	iSM2320Bw CO3 Alk as CaCO3	D	59				
1720505-03	iSM2320Bw HCO3 Alk as CaCC	D	59				
1720505-03	iSM2320Bw OH Alk as CaCO3	D	59				
1720505-03	ISM2510Bw EC	D	59				
1720505-04	iSM2320Bw CO3 Alk as CaCO3	D	60				
1720505-04	iSM2320Bw HCO3 Alk as CaCC	D	60				
1720505-04	iSM2320Bw OH Alk as CaCO3	D	60				
1720505-04	ISM2510Bw EC	D	60				
1720505-05	iSM2320Bw CO3 Alk as CaCO3	D	61				
1720505-05	iSM2320Bw HCO3 Alk as CaCC	D	61				
1720505-05	iSM2320Bw OH Alk as CaCO3	D	61				
1720505-05	ISM2510Bw EC	D	61				
B[G2120-BS1	QC		62				
B[G2120-BS2	QC		63				
B[G2120-BS3	QC		64				
B[G2120-BLK1	QC		65				
1720550-05	i120.1w EC	H	66				BatchQC
1720550-05	i150.1w pH	H	66				
1720550-05	iSM2320Bw CO3	H	66				
1720550-05	iSM2320Bw HCO3	H	66				
1720550-05	iSM2320Bw OH	H	66				
1720550-05	ISM2510Bw EC	H	66				
B[G2120-DUP1	QC		67				
1720617-01	i150.1w pH	A	68				
1720617-01	iSM2320Bw CO3	A	68				
1720617-01	iSM2320Bw HCO3	A	68				
1720617-01	iSM2320Bw OH	A	68				
1720617-01	ISM2510Bw EC	A	68				
1720632-01	i120.1w EC	A	69				



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20405
Class: WET
Method: EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE

EPA-300.0

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Client Sample Id:

Lab Sample Id:

27EW-02_170725

1720405-01

27EW-04_170725

1720405-03

27EW-04_170725

1720405-03RE1

27EW-08_170725

1720405-04

27EW-14_170725

1720405-05

27EW-18_170725

1720405-06

27EW-13_170725

1720405-13

27EW-16_170725

1720405-14

27EW-17_170725

1720405-15

27MW14_170725

1720405-17

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: Sara Guron

Date: 08-25-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS

EPA-300.0

Laboratory: BC Laboratories

SDG: 17-20405

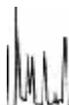
Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: IC5

Analyte	DL	LOD	LOQ	Units
Chloride	0.077	0.1	0.5	mg/L
Nitrate as NO3	0.092	0.23	0.44	mg/L
Nitrate as N	0.021	0.05	0.1	mg/L
Sulfate	0.13	0.2	1	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27EW-02_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-01

File ID: E072617.seq-05

Sampled: 07/25/17 09:40

Prepared: 07/26/17 17:00

Analyzed: 07/26/17 20:23

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2266

Sequence:

1713290

Calibration: UNASSIGNED

Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	23	0.077	0.10	0.50	1		EPA-300.0
14797-55-8	Nitrate as N	0.050	0.021	0.050	0.10	1	U	EPA-300.0
14808-79-8	Sulfate	80	0.13	0.20	1.0	1		EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27EW-04_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-03

File ID: E072617.seq-09

Sampled: 07/25/17 11:10

Prepared: 07/26/17 17:00

Analyzed: 07/26/17 21:35

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2266

Sequence:

1713290

Calibration: UNASSIGNED

Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	15	0.15	0.20	1.0	2	D	EPA-300.0
14797-55-8	Nitrate as N	0.10	0.042	0.10	0.20	2	UD	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27EW-04_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-03RE1

File ID: E072617.seq-36

Sampled: 07/25/17 11:10

Prepared: 07/26/17 17:00

Analyzed: 07/27/17 05:38

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2266

Sequence: 1713290

Calibration: UNASSIGNED

Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14808-79-8	Sulfate	1000	0.65	1.0	5.0	5	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27EW-08_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-04

File ID: E072617.seq-10

Sampled: 07/25/17 11:15

Prepared: 07/26/17 17:00

Analyzed: 07/26/17 21:53

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2266

Sequence:

1713290

Calibration: UNASSIGNED

Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	16	0.077	0.10	0.50	1		EPA-300.0
14797-55-8	Nitrate as N	0.052	0.021	0.050	0.10	1	J	EPA-300.0
14808-79-8	Sulfate	79	0.13	0.20	1.0	1		EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27EW-14_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-05

File ID: E072617.seq-11

Sampled: 07/25/17 11:40

Prepared: 07/26/17 17:00

Analyzed: 07/26/17 22:11

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2266

Sequence:

1713290

Calibration: UNASSIGNED

Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	17	0.38	0.50	2.5	5	D	EPA-300.0
14797-55-8	Nitrate as N	0.25	0.10	0.25	0.50	5	UD	EPA-300.0
14808-79-8	Sulfate	1200	0.65	1.0	5.0	5	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27EW-18_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-06

File ID: E072617.seq-12

Sampled: 07/25/17 09:35

Prepared: 07/26/17 17:00

Analyzed: 07/26/17 22:29

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2266

Sequence:

1713290

Calibration: UNASSIGNED

Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	11	0.077	0.10	0.50	1		EPA-300.0
14797-55-8	Nitrate as N	0.25	0.021	0.050	0.10	1		EPA-300.0
14808-79-8	Sulfate	17	0.13	0.20	1.0	1		EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27EW-13_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-13

File ID: E072617.seq-15

Sampled: 07/25/17 12:50

Prepared: 07/26/17 17:00

Analyzed: 07/26/17 23:22

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2266

Sequence:

1713290

Calibration: UNASSIGNED

Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	30	0.15	0.20	1.0	2	D	EPA-300.0
14797-55-8	Nitrate as N	0.10	0.042	0.10	0.20	2	UD	EPA-300.0
14808-79-8	Sulfate	410	0.26	0.40	2.0	2	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27EW-16_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-14

File ID: E072617.seq-16

Sampled: 07/25/17 11:50

Prepared: 07/26/17 17:00

Analyzed: 07/26/17 23:40

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2266

Sequence:

1713290

Calibration: UNASSIGNED

Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	19	0.15	0.20	1.0	2	D	EPA-300.0
14797-55-8	Nitrate as N	0.10	0.042	0.10	0.20	2	UD	EPA-300.0
14808-79-8	Sulfate	370	0.26	0.40	2.0	2	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27EW-17_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-15

File ID: E072617.seq-17

Sampled: 07/25/17 12:35

Prepared: 07/26/17 17:00

Analyzed: 07/26/17 23:58

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2266

Sequence:

1713290

Calibration: UNASSIGNED

Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	9.8	0.15	0.20	1.0	2	D	EPA-300.0
14797-55-8	Nitrate as N	0.36	0.042	0.10	0.20	2	D	EPA-300.0
14808-79-8	Sulfate	470	0.26	0.40	2.0	2	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY

EPA-300.0

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Batch: B[G2266 Batch Matrix: Water Preparation: No Prep

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
27EW-02_170725	1720405-01	E072617.seq-05	07/26/17 17:00	
27EW-04_170725	1720405-03	E072617.seq-09	07/26/17 17:00	
27EW-04_170725	1720405-03RE1	E072617.seq-36	07/26/17 17:00	Added 7/27/2017 by OLH
27EW-08_170725	1720405-04	E072617.seq-10	07/26/17 17:00	
27EW-14_170725	1720405-05	E072617.seq-11	07/26/17 17:00	
27EW-18_170725	1720405-06	E072617.seq-12	07/26/17 17:00	
27EW-13_170725	1720405-13	E072617.seq-15	07/26/17 17:00	
27EW-16_170725	1720405-14	E072617.seq-16	07/26/17 17:00	
27EW-17_170725	1720405-15	E072617.seq-17	07/26/17 17:00	
27MW14_170725	1720405-17	E072617.seq-18	07/26/17 17:00	
Blank	B[G2266-BLK1	E072617.seq-03	07/26/17 17:00	
LCS	B[G2266-BS1	E072617.seq-04	07/26/17 17:00	
27EW-02_170725	B[G2266-DUP1	E072617.seq-06	07/26/17 17:00	
27EW-02_170725	B[G2266-MS1	E072617.seq-07	07/26/17 17:00	
27EW-02_170725	B[G2266-MSD1	E072617.seq-08	07/26/17 17:00	



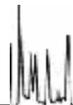
AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-300.0

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>		
Client:	<u>AMEC Environmental & Infrastructure- SAMCN</u>	Project:	<u>Alameda</u>		
Matrix:	<u>Water</u>	Laboratory ID:	<u>BIG2266-BLK1</u>	File ID:	<u>E072617.seq-03</u>
Prepared:	<u>07/26/17 17:00</u>	Preparation:	<u>No Prep</u>	Initial/Final:	<u>20 ml / 20 ml</u>
Analyzed:	<u>07/26/17 19:47</u>	Instrument:	<u>IC5</u>		
Batch:	<u>BIG2266</u>	Sequence:	<u>1713290</u>	Calibration:	<u>UNASSIGNED</u>

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
16887-00-6	Chloride	0.10	0.077	0.10	0.50	U
14797-55-8	Nitrate as N	0.050	0.021	0.050	0.10	U
14808-79-8	Sulfate	0.20	0.13	0.20	1.0	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES
EPA-300.0

27EW-02 170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2266-DUP1

Batch: B[G2266

Lab Source ID: 1720405-01

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Source Sample Name: 27EW-02 170725

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Chloride	10	22.730		22.720		0.0440		EPA-300.0
Nitrate as NO3	10	0.20806		0.17707		16.1		EPA-300.0
Nitrate as N	10	0.047000		0.040000		16.1		EPA-300.0
Sulfate	10	79.564		79.743		0.225		EPA-300.0

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-300.0

27EW-02 170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: BIG2266 Laboratory ID: BIG2266-MS1
Preparation: No Prep Initial/Final: 19.8 ml / 20 ml
Source Sample Number: 1720405-01

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Chloride	50.505	22.730	75.957	105	80 - 120
Nitrate as NO3	22.358	0.20806	22.277	98.7	80 - 120
Nitrate as N	5.0505	0.047000	5.0323	98.7	80 - 120
Sulfate	101.01	79.564	185.43	105	80 - 120

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Chloride	50.505	76.113	106	0.206	10	80 - 120
Nitrate as NO3	22.358	22.317	98.9	0.180	10	80 - 120
Nitrate as N	5.0505	5.0414	98.9	0.181	10	80 - 120
Sulfate	101.01	185.66	105	0.125	10	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
EPA-300.0

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water
Batch: B[G2266 Laboratory ID: B[G2266-BS1
Preparation: No Prep Initial/Final: 20 ml / 20 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Chloride	50.000	49.056	98.1	90 - 110
Nitrate as NO3	22.134	21.744	98.2	90 - 110
Nitrate as N	5.0000	4.9120	98.2	90 - 110
Sulfate	100.00	97.765	97.8	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-300.0

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713290</u>	Instrument:	<u>IC5</u>
Matrix:	<u>Water</u>	Calibration:	<u>UNASSIGNED</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713290-ICV1	E072617.seq-01	07/26/17 19:12
Initial Cal Blank	1713290-ICB1	E072617.seq-02	07/26/17 19:30
Blank	B[G2266-BLK1	E072617.seq-03	07/26/17 19:47
LCS	B[G2266-BS1	E072617.seq-04	07/26/17 20:05
27EW-02_170725	1720405-01	E072617.seq-05	07/26/17 20:23
27EW-02_170725	B[G2266-DUP1	E072617.seq-06	07/26/17 20:41
27EW-02_170725	B[G2266-MS1	E072617.seq-07	07/26/17 20:59
27EW-02_170725	B[G2266-MSD1	E072617.seq-08	07/26/17 21:17
27EW-04_170725	1720405-03	E072617.seq-09	07/26/17 21:35
27EW-08_170725	1720405-04	E072617.seq-10	07/26/17 21:53
27EW-14_170725	1720405-05	E072617.seq-11	07/26/17 22:11
27EW-18_170725	1720405-06	E072617.seq-12	07/26/17 22:29
Calibration Check	1713290-CCV1	E072617.seq-13	07/26/17 22:46
Calibration Blank	1713290-CCB1	E072617.seq-14	07/26/17 23:04
27EW-13_170725	1720405-13	E072617.seq-15	07/26/17 23:22
27EW-16_170725	1720405-14	E072617.seq-16	07/26/17 23:40
27EW-17_170725	1720405-15	E072617.seq-17	07/26/17 23:58
27MW14_170725	1720405-17	E072617.seq-18	07/27/17 00:16
Calibration Check	1713290-CCV2	E072617.seq-25	07/27/17 02:21
Calibration Blank	1713290-CCB2	E072617.seq-26	07/27/17 02:39
27EW-04_170725	1720405-03RE1	E072617.seq-36	07/27/17 05:38
Calibration Check	1713290-CCV3	E072617.seq-37	07/27/17 05:56
Calibration Blank	1713290-CCB3	E072617.seq-38	07/27/17 06:14



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**BLANKS
EPA-300.0**

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Instrument ID: IC5

Project: Alameda

Sequence: 1713290

Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	DL	LOD	LOQ	Units	C	Method
1713290-ICB1	Chloride	0.0000	0.077		0.50	mg/L	U	EPA-300.0
	Nitrate as NO3	0.0000	0.092		0.44	mg/L	U	EPA-300.0
	Nitrate as N	0.0000	0.021		0.10	mg/L	U	EPA-300.0
	Sulfate	0.0000	0.13		1.0	mg/L	U	EPA-300.0
1713290-CCB1	Chloride	0.0000	0.077		0.50	mg/L	U	EPA-300.0
	Nitrate as NO3	0.0000	0.092		0.44	mg/L	U	EPA-300.0
	Nitrate as N	0.0000	0.021		0.10	mg/L	U	EPA-300.0
	Sulfate	0.0000	0.13		1.0	mg/L	U	EPA-300.0
1713290-CCB2	Chloride	0.0000	0.077		0.50	mg/L	U	EPA-300.0
	Nitrate as NO3	0.0000	0.092		0.44	mg/L	U	EPA-300.0
	Nitrate as N	0.0000	0.021		0.10	mg/L	U	EPA-300.0
	Sulfate	0.0000	0.13		1.0	mg/L	U	EPA-300.0
1713290-CCB3	Chloride	0.0000	0.077		0.50	mg/L	U	EPA-300.0
	Nitrate as NO3	0.0000	0.092		0.44	mg/L	U	EPA-300.0
	Nitrate as N	0.0000	0.021		0.10	mg/L	U	EPA-300.0
	Sulfate	0.0000	0.13		1.0	mg/L	U	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-300.0

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Instrument ID: IC5

Calibration: UNASSIGNED

Control Limit: +/- 10.00%

Sequence: 1713290

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713290-ICV1	Chloride	50.000	46.076	92.2	mg/L	EPA-300.0
	Nitrate as NO3	22.134	20.616	93.1	mg/L	EPA-300.0
	Nitrate as N	5.0000	4.6570	93.1	mg/L	EPA-300.0
	Sulfate	100.00	91.163	91.2	mg/L	EPA-300.0
1713290-CCV1	Chloride	50.000	47.543	95.1	mg/L	EPA-300.0
	Nitrate as NO3	22.134	21.319	96.3	mg/L	EPA-300.0
	Nitrate as N	5.0000	4.8160	96.3	mg/L	EPA-300.0
	Sulfate	100.00	93.987	94.0	mg/L	EPA-300.0
1713290-CCV2	Chloride	50.000	48.960	97.9	mg/L	EPA-300.0
	Nitrate as NO3	22.134	21.780	98.4	mg/L	EPA-300.0
	Nitrate as N	5.0000	4.9200	98.4	mg/L	EPA-300.0
	Sulfate	100.00	95.599	95.6	mg/L	EPA-300.0
1713290-CCV3	Chloride	50.000	48.401	96.8	mg/L	EPA-300.0
	Nitrate as NO3	22.134	21.479	97.0	mg/L	EPA-300.0
	Nitrate as N	5.0000	4.8520	97.0	mg/L	EPA-300.0
	Sulfate	100.00	95.342	95.3	mg/L	EPA-300.0

* Values outside of QC limits



AMEC Environmental & Infrastructure- 9210 Sky Park Court #200 San Diego, CA 92123	Reported: 8/25/2017 9:39:35AM Project: Alameda Project Number: 5023146096 Project Manager: Kevin Olness
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HOLDING TIME SUMMARY

EPA-300.0

Laboratory: <u>BC Laboratories</u>	SDG: <u>17-20405</u>
Client: <u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project: <u>Alameda</u>

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
27EW-02_170725	07/25/17 09:40	07/25/17 22:20	07/26/17 17:00	1.00	28.00	07/26/17 20:23	1.00	28.00	
27EW-02_170725	07/25/17 09:40	07/25/17 22:20	07/26/17 17:00	1.45	2.00	07/26/17 20:23	1.45	2.00	
27EW-04_170725	07/25/17 11:10	07/25/17 22:20	07/26/17 17:00	1.43	2.00	07/26/17 21:35	1.43	2.00	
27EW-04_170725	07/25/17 11:10	07/25/17 22:20	07/26/17 17:00	1.00	28.00	07/26/17 21:35	1.00	28.00	
27EW-04_170725	07/25/17 11:10	07/25/17 22:20	07/26/17 17:00	2.00	28.00	07/27/17 05:38	2.00	28.00	
27EW-08_170725	07/25/17 11:15	07/25/17 22:20	07/26/17 17:00	1.44	2.00	07/26/17 21:53	1.44	2.00	
27EW-08_170725	07/25/17 11:15	07/25/17 22:20	07/26/17 17:00	1.00	28.00	07/26/17 21:53	1.00	28.00	
27EW-14_170725	07/25/17 11:40	07/25/17 22:20	07/26/17 17:00	1.00	28.00	07/26/17 22:11	1.00	28.00	
27EW-14_170725	07/25/17 11:40	07/25/17 22:20	07/26/17 17:00	1.44	2.00	07/26/17 22:11	1.44	2.00	
27EW-18_170725	07/25/17 09:35	07/25/17 22:20	07/26/17 17:00	1.54	2.00	07/26/17 22:29	1.54	2.00	
27EW-18_170725	07/25/17 09:35	07/25/17 22:20	07/26/17 17:00	1.00	28.00	07/26/17 22:29	1.00	28.00	
27EW-13_170725	07/25/17 12:50	07/25/17 22:20	07/26/17 17:00	1.44	2.00	07/26/17 23:22	1.44	2.00	
27EW-13_170725	07/25/17 12:50	07/25/17 22:20	07/26/17 17:00	1.00	28.00	07/26/17 23:22	1.00	28.00	
27EW-16_170725	07/25/17 11:50	07/25/17 22:20	07/26/17 17:00	1.49	2.00	07/26/17 23:40	1.49	2.00	
27EW-16_170725	07/25/17 11:50	07/25/17 22:20	07/26/17 17:00	1.00	28.00	07/26/17 23:40	1.00	28.00	
27EW-17_170725	07/25/17 12:35	07/25/17 22:20	07/26/17 17:00	1.47	2.00	07/26/17 23:58	1.47	2.00	
27EW-17_170725	07/25/17 12:35	07/25/17 22:20	07/26/17 17:00	1.00	28.00	07/26/17 23:58	1.00	28.00	
27MW14_170725	07/25/17 12:55	07/25/17 22:20	07/26/17 17:00	2.00	28.00	07/27/17 00:16	2.00	28.00	
27MW14_170725	07/25/17 12:55	07/25/17 22:20	07/26/17 17:00	1.47	2.00	07/27/17 00:16	1.47	2.00	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument IC5



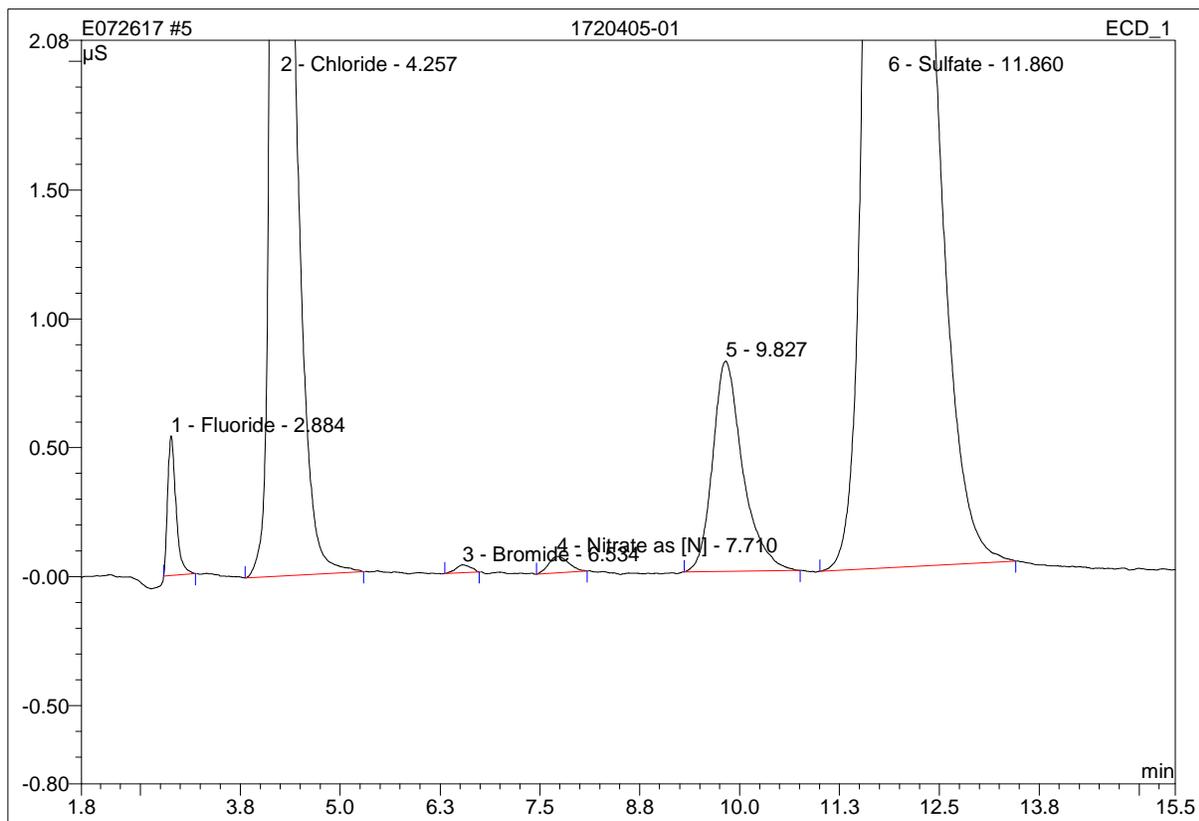
Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Samples

5 1720405-01			
Sample Name:	1720405-01	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 20:23	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	0.542	0.065	0.39	0.260	BMB
2	4.26	Chloride	31.433	4.812	28.35	22.730	BMB
3	6.53	Bromide	0.031	0.007	0.04	0.104	BMB
4	7.71	Nitrate as [N]	0.064	0.019	0.11	0.047	BMB
5	9.83	n.a.	0.816	0.357	2.10	n.a.	BMB
6	11.86	Sulfate	25.830	11.711	69.01	79.564	BMB
Total:			58.716	16.971	100.00	102.705	

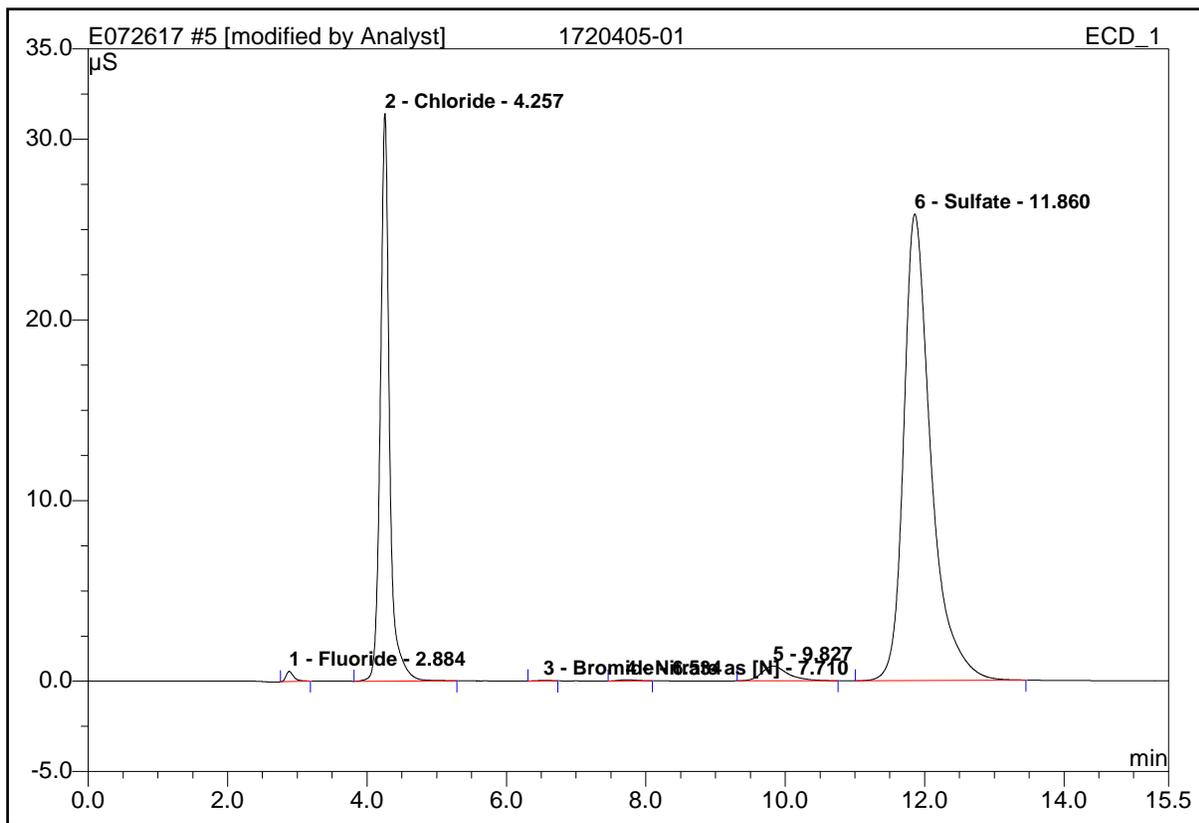
modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

5 1720405-01			
Sample Name:	1720405-01	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 20:23	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	0.566	0.072	0.43	0.287	BMB*
2	4.26	Chloride	31.433	4.812	28.34	22.730	BMB
3	6.53	Bromide	0.031	0.007	0.04	0.104	BMB
4	7.71	Nitrate as [N]	0.064	0.019	0.11	0.047	BMB
5	9.83	n.a.	0.816	0.357	2.10	n.a.	BMB
6	11.86	Sulfate	25.830	11.711	68.98	79.564	BMB
Total:			58.741	16.977	100.00	102.732	

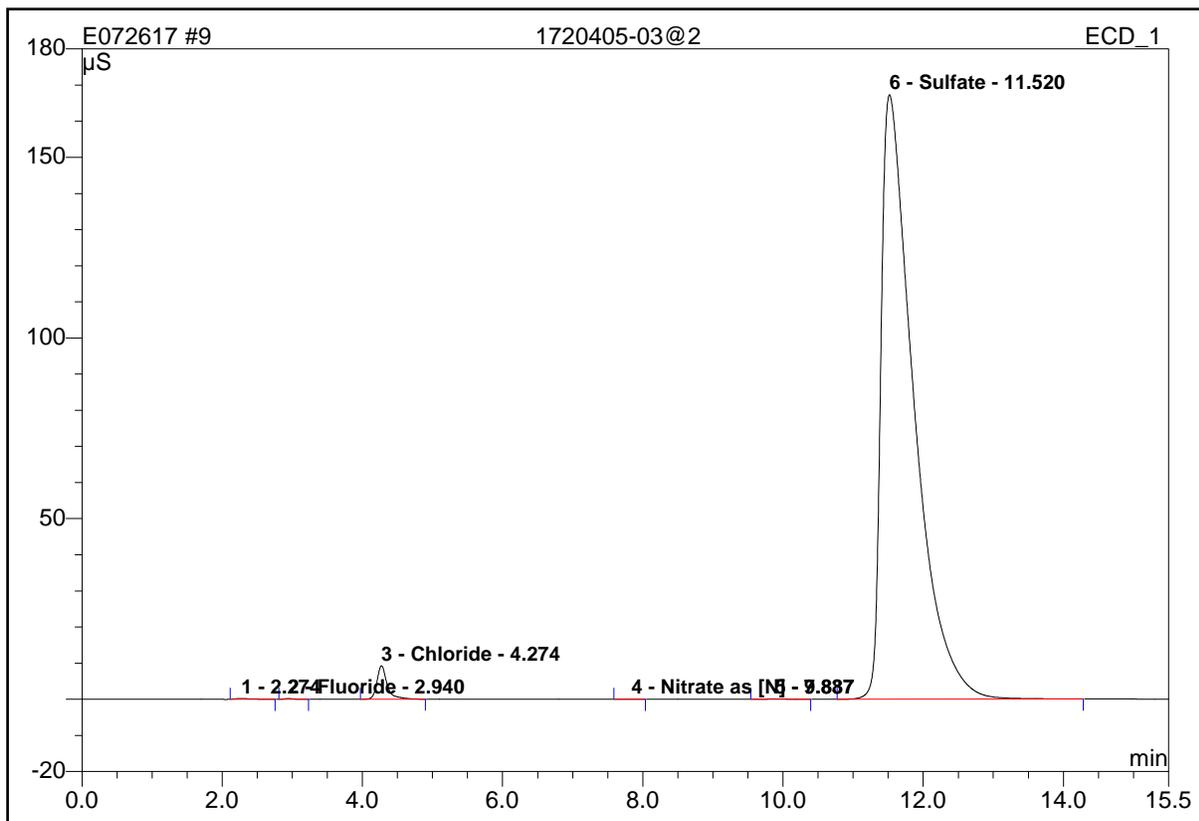
modified on: 07.27.17 00:00 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

9 1720405-03@2			
Sample Name:	1720405-03@2	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 21:35	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μ S	Area μ S*min	Rel.Area %	Amount ppm	Type
1	2.27	n.a.	0.205	0.054	0.06	n.a.	BMB
2	2.94	Fluoride	0.227	0.029	0.03	0.116	BMB
3	4.27	Chloride	9.276	1.559	1.70	7.552	BMB
4	7.84	Nitrate as [N]	0.017	0.004	0.00	0.009	BMB
5	9.89	n.a.	0.058	0.027	0.03	n.a.	BMB
6	11.52	Sulfate	167.317	90.221	98.18	478.063	BMB
Total:			177.101	91.894	100.00	485.739	

modified on: n.a.

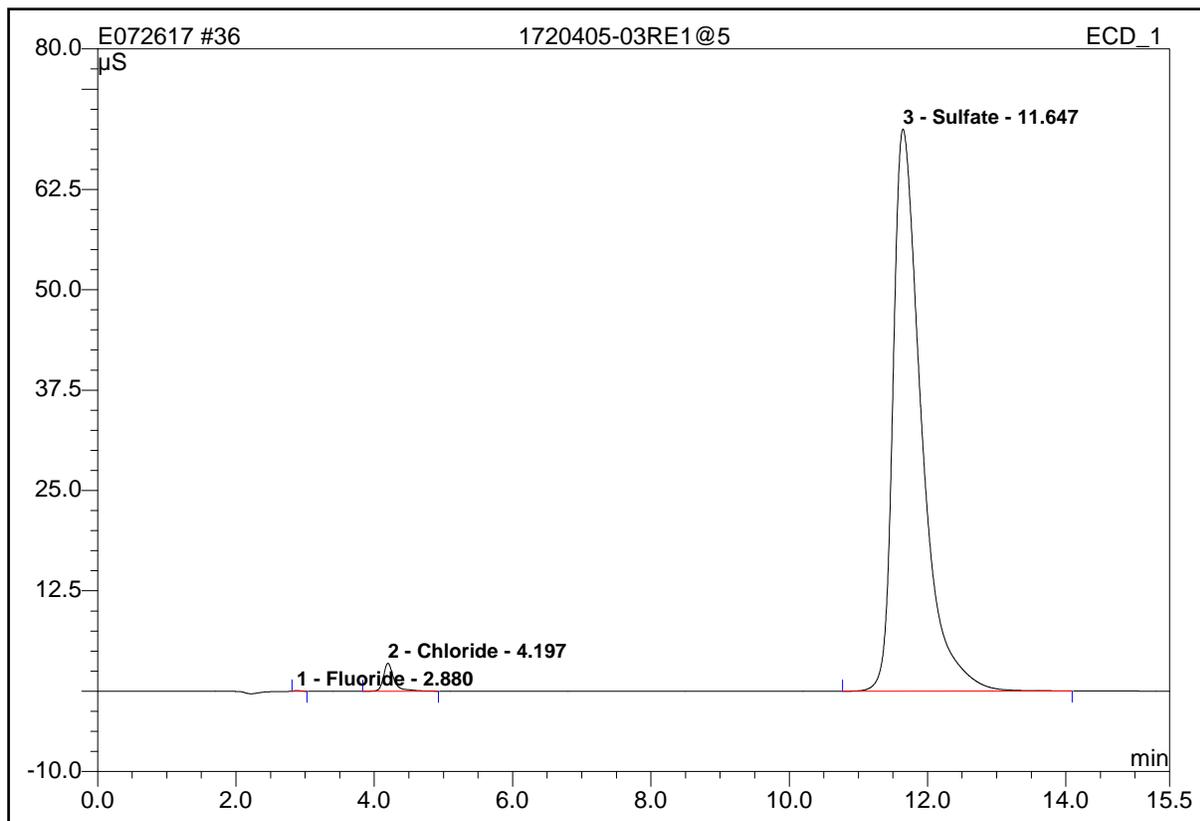
By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
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R = Rider
BMB = This peak type is for resolved peaks.

36 1720405-03RE1@5			
Sample Name:	1720405-03RE1@5	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/27/2017 5:38	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	0.071	0.007	0.02	0.028	BMB
2	4.20	Chloride	3.487	0.616	1.82	3.044	BMB
3	11.65	Sulfate	70.007	33.208	98.16	206.844	BMB
Total:			73.566	33.832	100.00	209.916	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

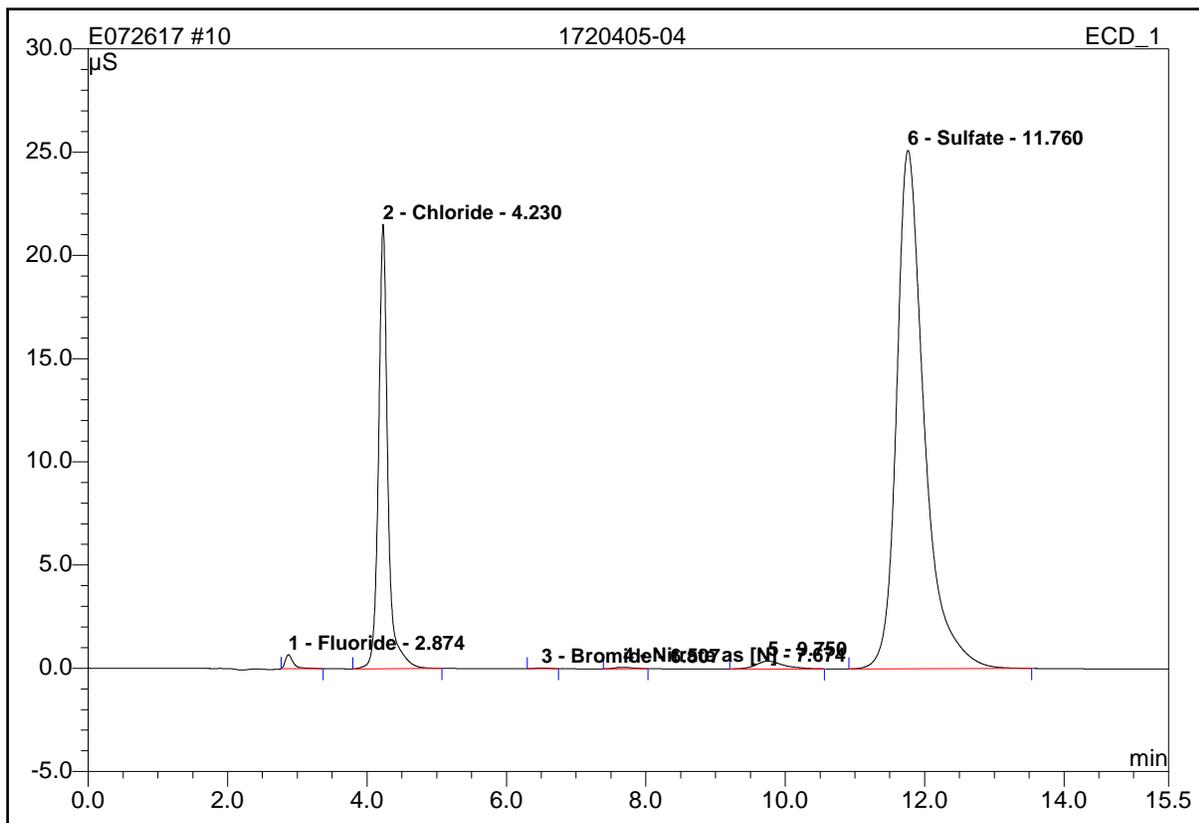
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.

10 1720405-04			
Sample Name:	1720405-04	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 21:53	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.87	Fluoride	0.670	0.089	0.59	0.355	BMB
2	4.23	Chloride	21.525	3.339	21.98	15.928	BMB
3	6.51	Bromide	0.033	0.007	0.05	0.106	BMB
4	7.67	Nitrate as [N]	0.071	0.021	0.14	0.052	BMB
5	9.75	n.a.	0.375	0.168	1.11	n.a.	BMB
6	11.76	Sulfate	25.111	11.566	76.14	78.629	BMB
Total:			47.784	15.190	100.00	95.071	

modified on: n.a.

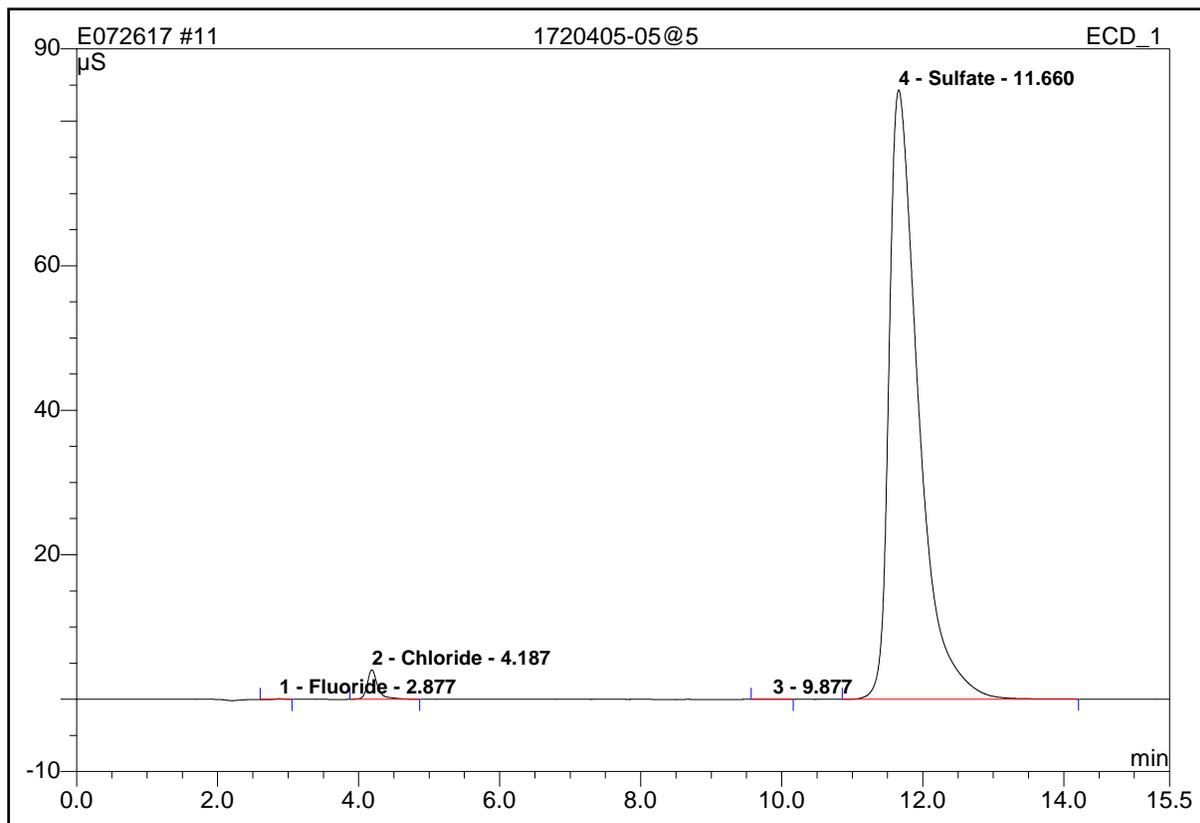
By: OLH/EMW/JSW

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B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

11 1720405-05@5			
Sample Name:	1720405-05@5	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 22:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	0.089	0.006	0.01	0.023	MB
2	4.19	Chloride	4.072	0.707	1.70	3.479	BMB
3	9.88	n.a.	0.028	0.010	0.02	n.a.	BMB
4	11.66	Sulfate	84.318	40.739	98.26	247.273	BMB
Total:			88.508	41.462	100.00	250.775	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

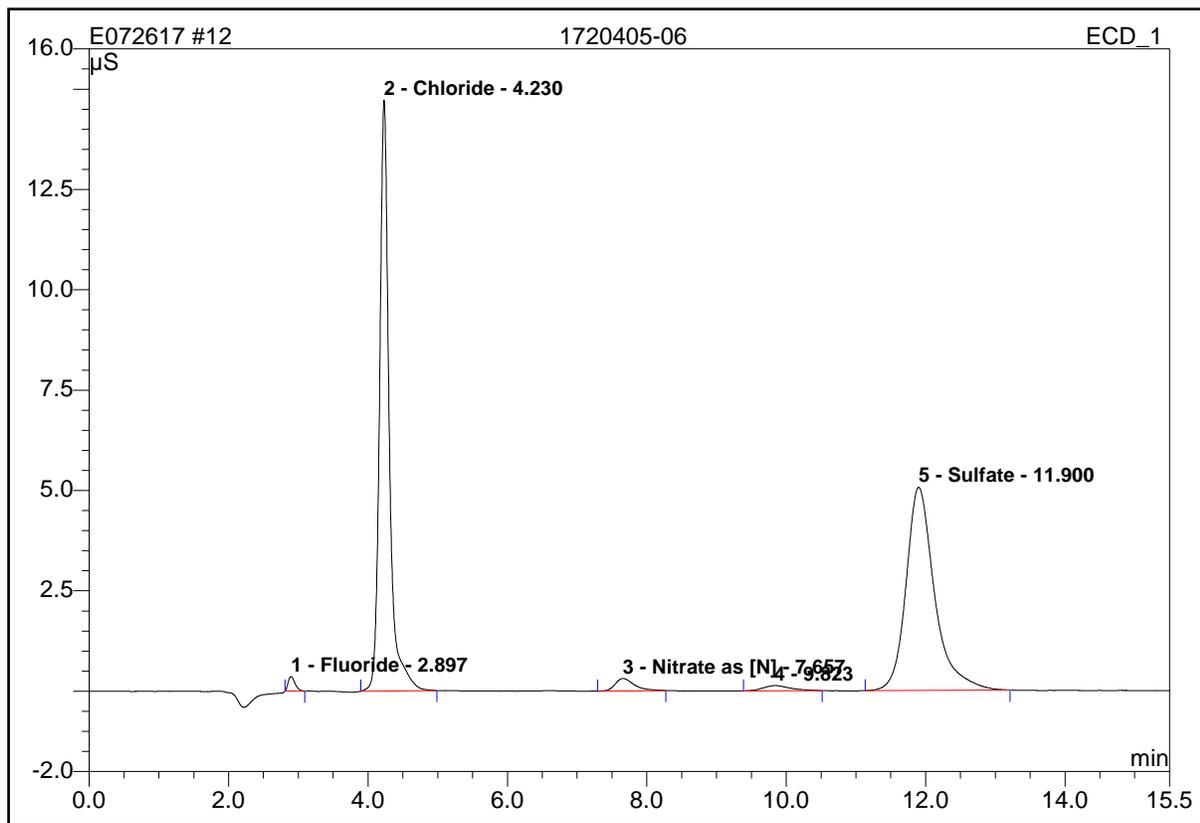
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.

12 1720405-06			
Sample Name:	1720405-06	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 22:29	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.363	0.042	0.84	0.165	BMB
2	4.23	Chloride	14.724	2.364	47.57	11.359	BMB
3	7.66	Nitrate as [N]	0.310	0.098	1.97	0.253	BMB
4	9.82	n.a.	0.129	0.059	1.18	n.a.	BMB
5	11.90	Sulfate	5.061	2.407	48.44	17.223	BMB
Total:			20.587	4.969	100.00	29.000	

modified on: n.a.

By: OLH/EMW/JSW

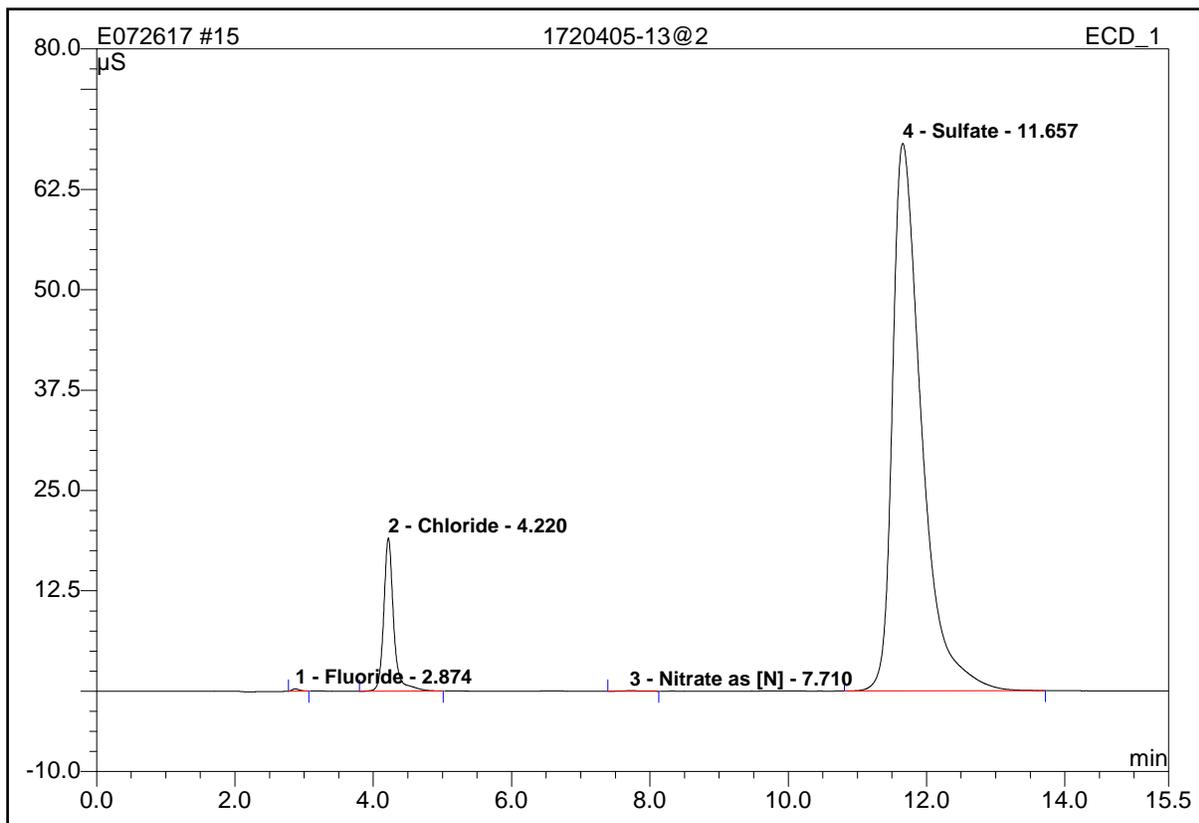
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.

15 1720405-13@2			
Sample Name:	1720405-13@2	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 23:22	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.87	Fluoride	0.283	0.034	0.09	0.134	BMB
2	4.22	Chloride	19.100	3.191	8.75	15.238	BMB
3	7.71	Nitrate as [N]	0.049	0.016	0.04	0.039	BMB
4	11.66	Sulfate	68.214	33.213	91.11	206.872	BMB
Total:			87.646	36.454	100.00	222.283	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

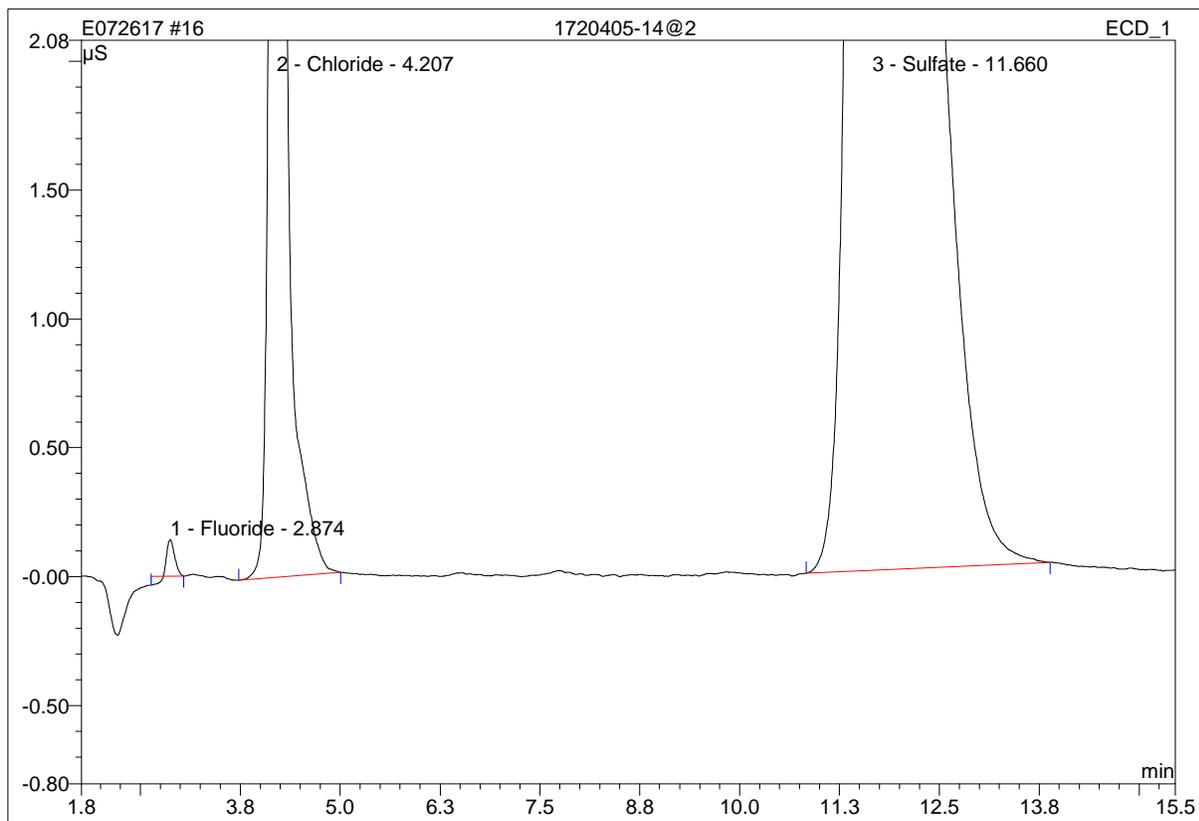
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.

16 1720405-14@2			
Sample Name:	1720405-14@2	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 23:40	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.87	Fluoride	0.141	0.012	0.04	0.048	MB
2	4.21	Chloride	11.519	1.985	6.30	9.572	BMB
3	11.66	Sulfate	61.218	29.505	93.66	186.268	BMB
Total:			72.878	31.503	100.00	195.888	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

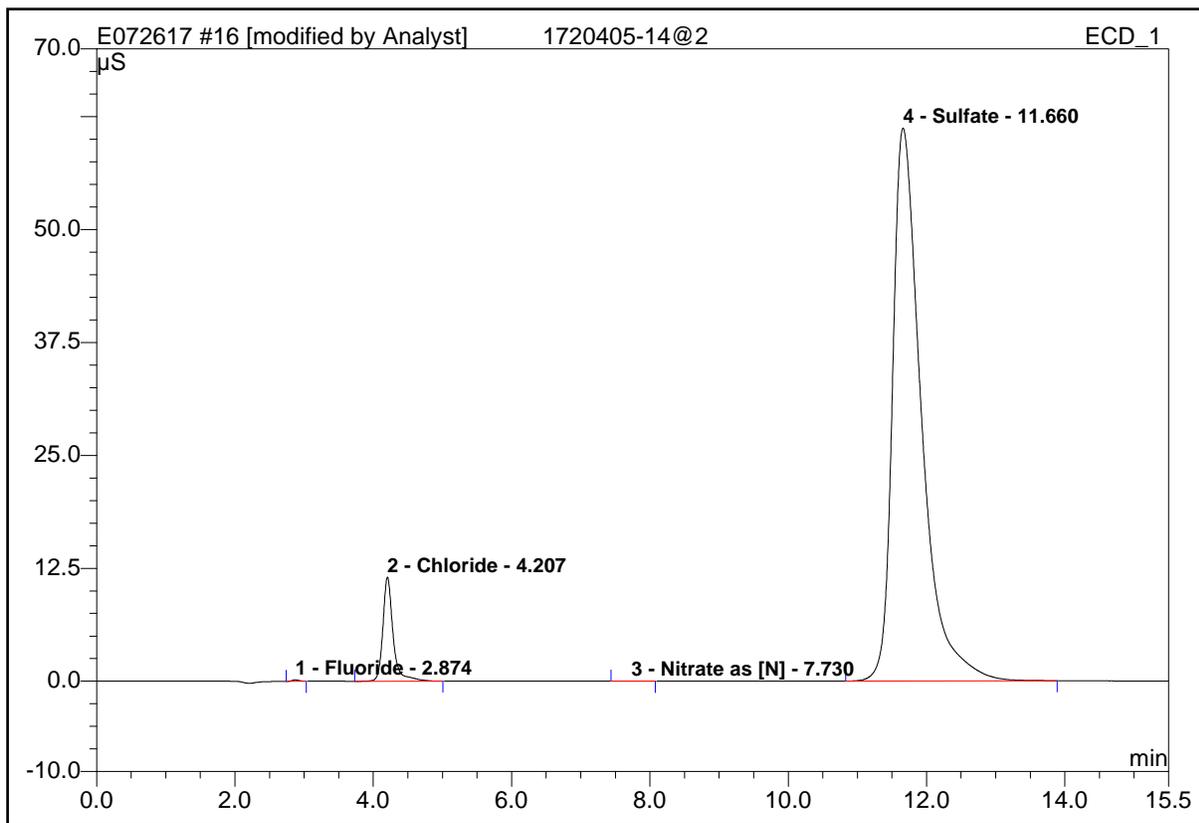
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R= Rider

BMB = This peak type is for resolved peaks.

16 1720405-14@2			
Sample Name:	1720405-14@2	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 23:40	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.87	Fluoride	0.154	0.019	0.06	0.075	BMB*
2	4.21	Chloride	11.519	1.985	6.30	9.572	BMB
3	7.73	Nitrate as [N]	0.018	0.005	0.02	0.012	BMB*
4	11.66	Sulfate	61.218	29.505	93.63	186.268	BMB
Total:			72.908	31.514	100.00	195.926	

modified on: 07.27.17 09:51 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

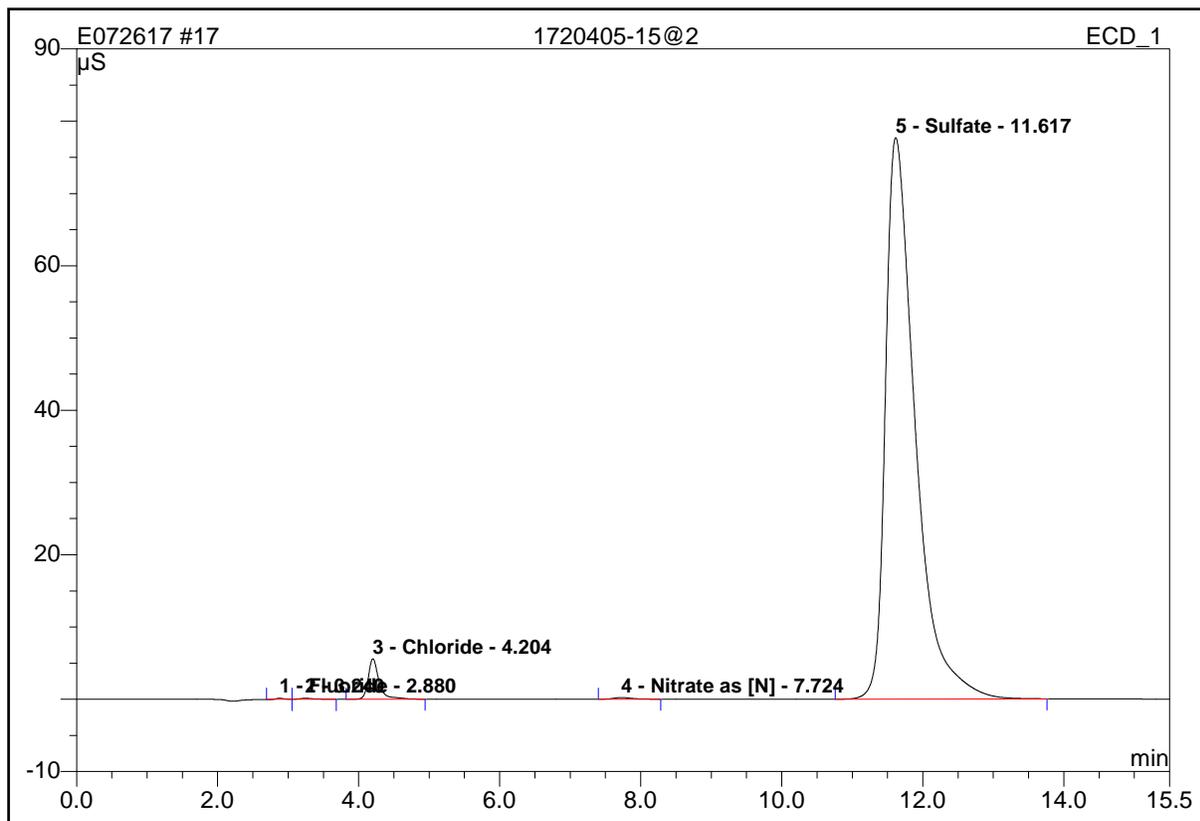
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.

17 1720405-15@2			
Sample Name:	1720405-15@2	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 23:58	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	0.155	0.016	0.04	0.064	M
2	3.24	n.a.	0.143	0.035	0.09	n.a.	MB
3	4.20	Chloride	5.601	1.002	2.56	4.897	BMB
4	7.72	Nitrate as [N]	0.222	0.070	0.18	0.180	BMB
5	11.62	Sulfate	77.707	37.956	97.12	232.542	BMB
Total:			83.829	39.080	100.00	237.683	

modified on: n.a.

By: OLH/EMW/JSW

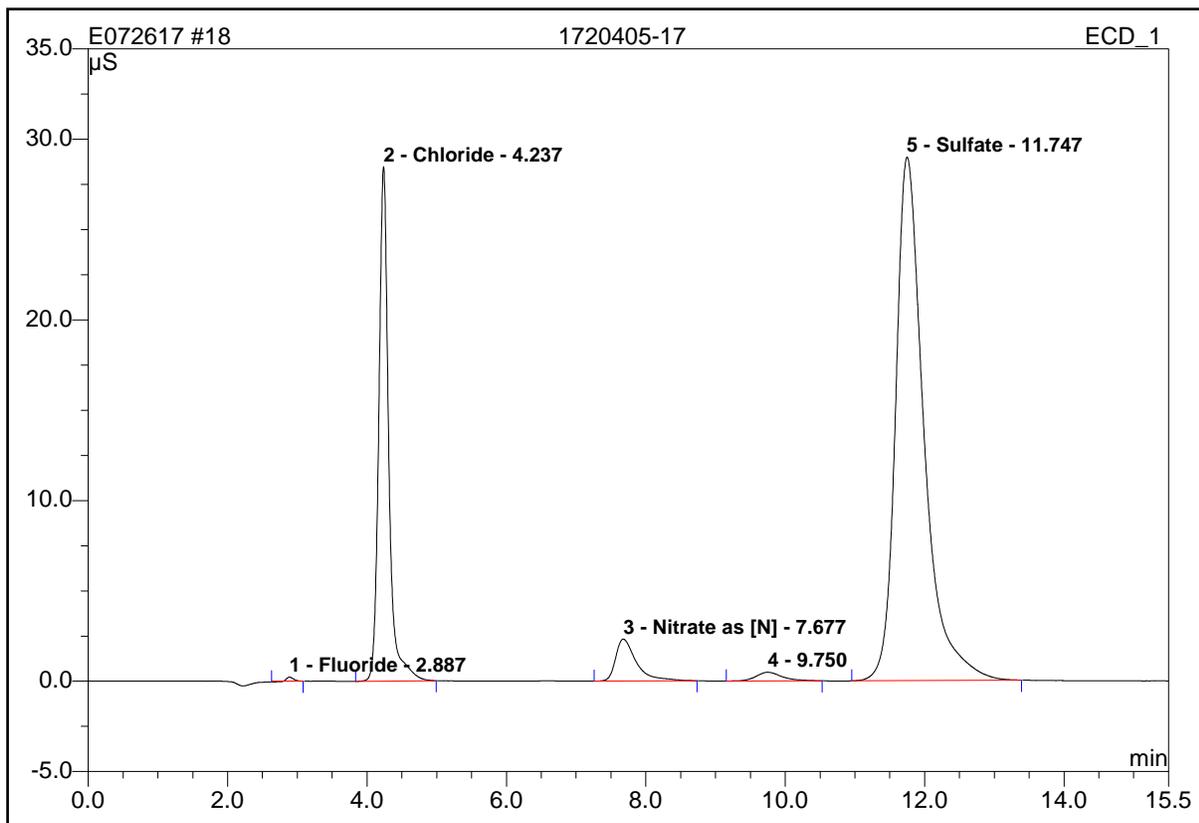
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.

18 1720405-17			
Sample Name:	1720405-17	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/27/2017 0:16	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.224	0.020	0.10	0.080	MB
2	4.24	Chloride	28.488	4.716	24.34	22.292	BMB
3	7.68	Nitrate as [N]	2.326	0.799	4.12	2.019	BMB
4	9.75	n.a.	0.478	0.206	1.07	n.a.	BMB
5	11.75	Sulfate	28.981	13.634	70.37	91.817	BMB
Total:			60.496	19.376	100.00	116.208	

modified on: n.a.

By: OLH/EMW/JSW

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b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.



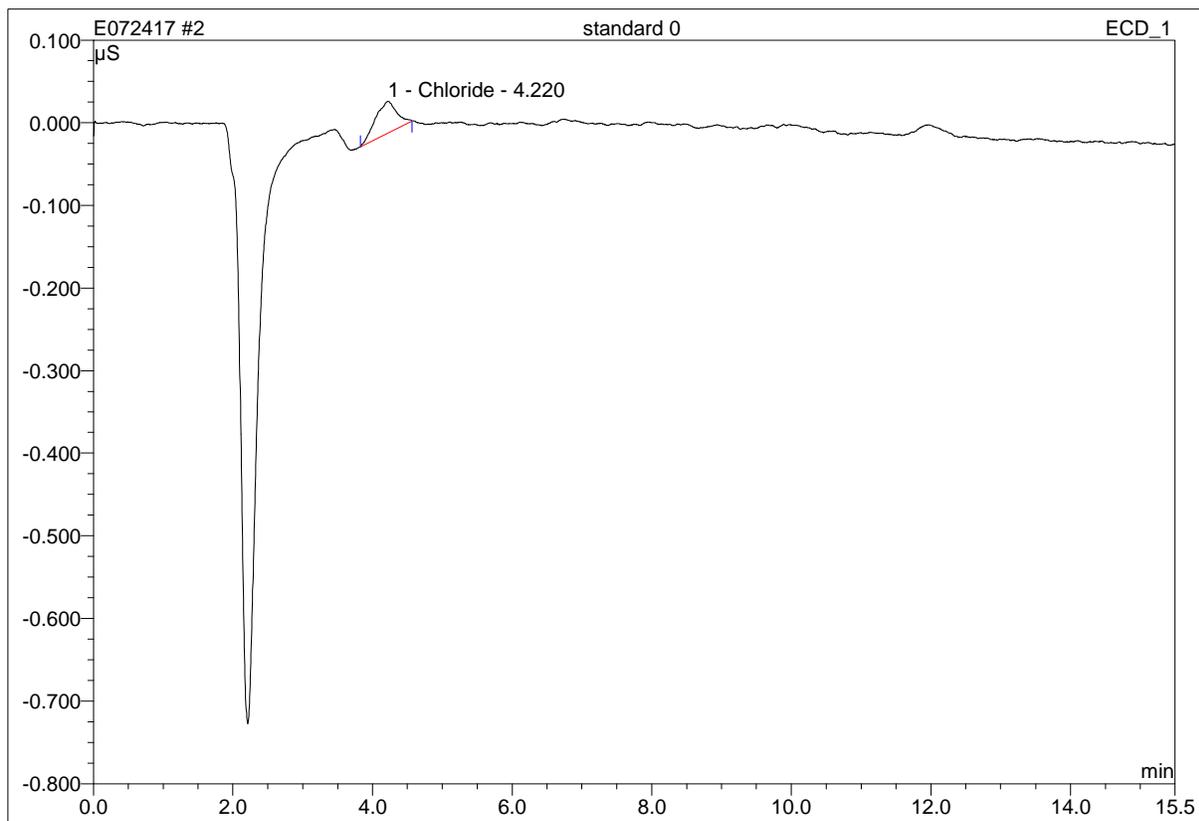
Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Calibration Standards

2 standard 0			
Sample Name:	standard 0	Injection Volume:	20.0
Vial Number:	23	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:24	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.22	Chloride	0.038	0.014	100.00	0.227	BMB
Total:			0.038	0.014	100.00	0.227	

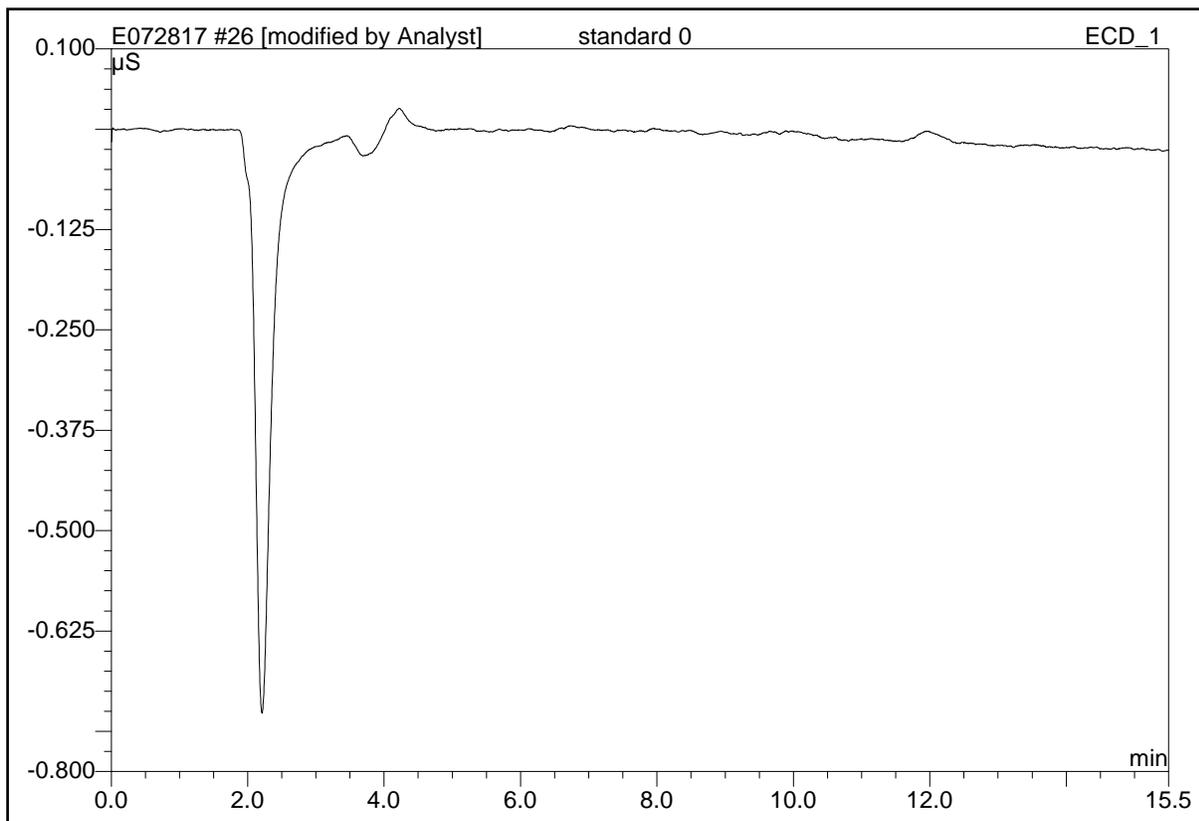
modified on: n.a.

By: OLH/EMW/JSW

- * = Manual integrations due to peak, rider or baseline error.
- B = Baseline with direct contact on the left or right side of peak.
- b = Baseline is below non resolved peaks drawn from peak end to peak end.
- M = Main
- R= Rider
- BMB = This peak type is for resolved peaks.

close up/Integration

26 standard 0			
Sample Name:	standard 0	Injection Volume:	20.0
Vial Number:	23	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:24	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000

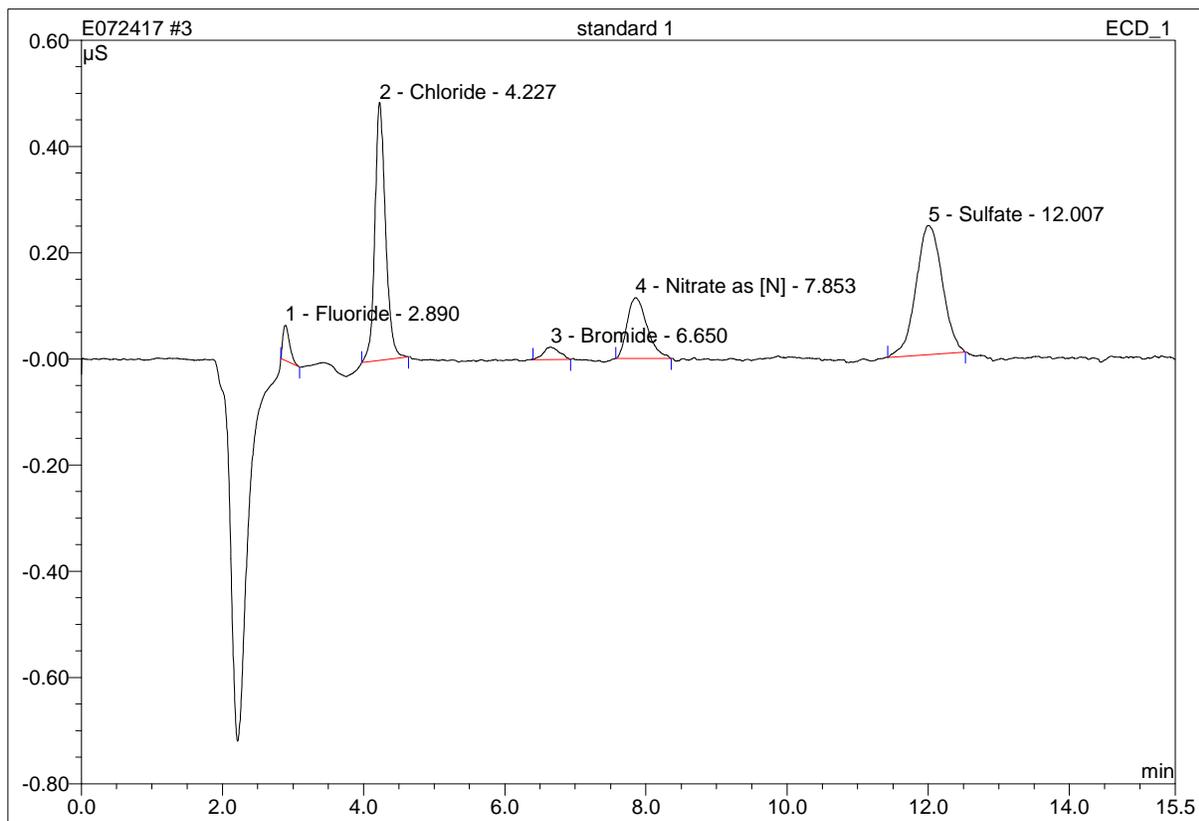


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: 07.24.17 11:54 By: OLH/EMW/JSW

- * = Manual integrations due to peak, rider, or baseline errors.
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- b = Baseline is below non resolved peaks drawn from peak end to peak end.
- M = Main
- R = Rider
- BMB = This peak type is for resolved peaks.

3 standard 1			
Sample Name:	standard 1	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:42	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.067	0.007	3.06	0.044	BMB
2	4.23	Chloride	0.486	0.085	35.31	0.571	BMB
3	6.65	Bromide	0.023	0.006	2.54	0.095	BMB
4	7.85	Nitrate as [N]	0.115	0.037	15.51	0.103	BMB
5	12.01	Sulfate	0.243	0.105	43.57	0.964	BMB
Total:			0.933	0.241	100.00	1.776	

modified on: n.a.

By: OLH/EMW/JSW

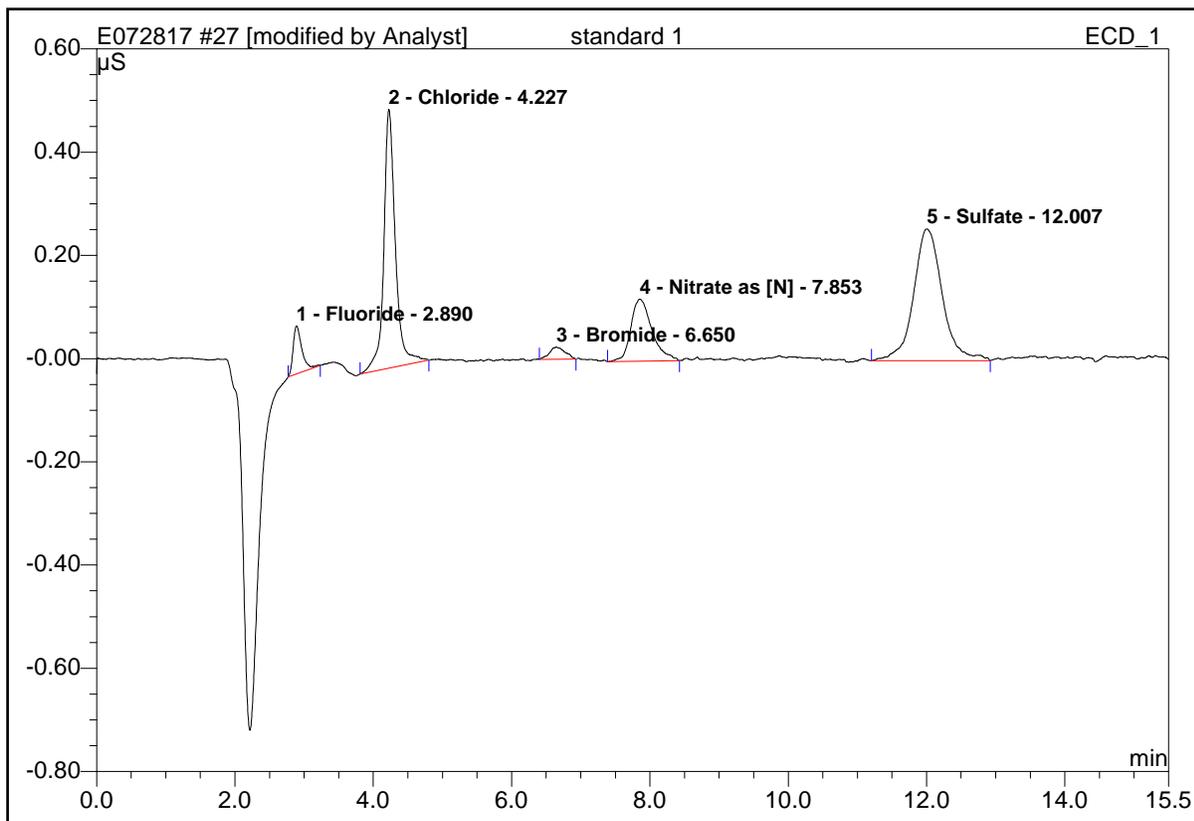
* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

27 standard 1

Sample Name:	standard 1	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:42	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.093	0.013	4.77	0.053	BMB*
2	4.23	Chloride	0.501	0.097	34.38	0.541	BMB*
3	6.65	Bromide	0.023	0.006	2.17	0.095	BMB
4	7.85	Nitrate as [N]	0.120	0.042	15.10	0.109	BMB*
5	12.01	Sulfate	0.255	0.123	43.57	1.030	BMB*
Total:			0.993	0.281	100.00	1.828	

modified on: 07.24.17 11:55 By: OLH/EMW/JSW

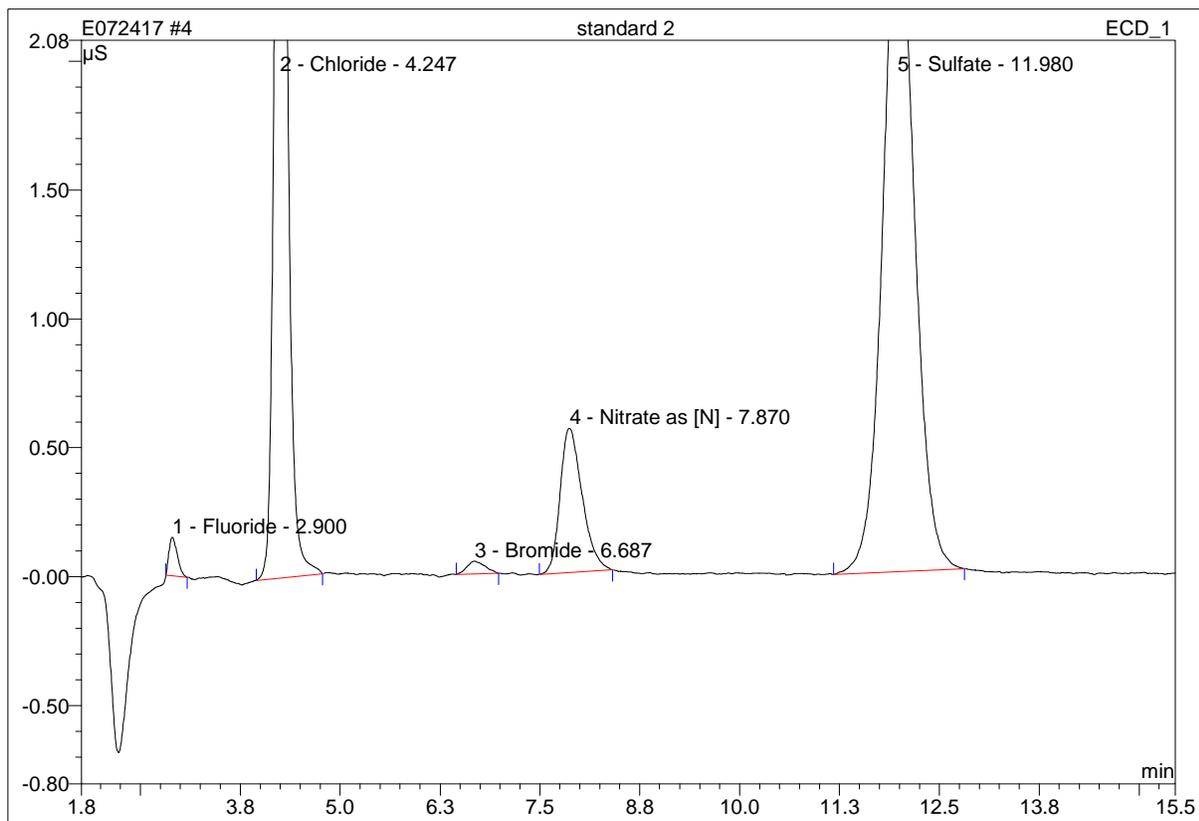
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.

4 standard 2			
Sample Name:	standard 2	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:59	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μ S	Area μ S*min	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.149	0.018	0.79	0.088	BMB
2	4.25	Chloride	5.060	0.845	37.40	4.228	BMB
3	6.69	Bromide	0.050	0.013	0.58	0.195	BMB
4	7.87	Nitrate as [N]	0.560	0.179	7.93	0.469	BMB
5	11.98	Sulfate	2.684	1.204	53.30	8.796	BMB
Total:			8.503	2.259	100.00	13.776	

modified on: n.a.

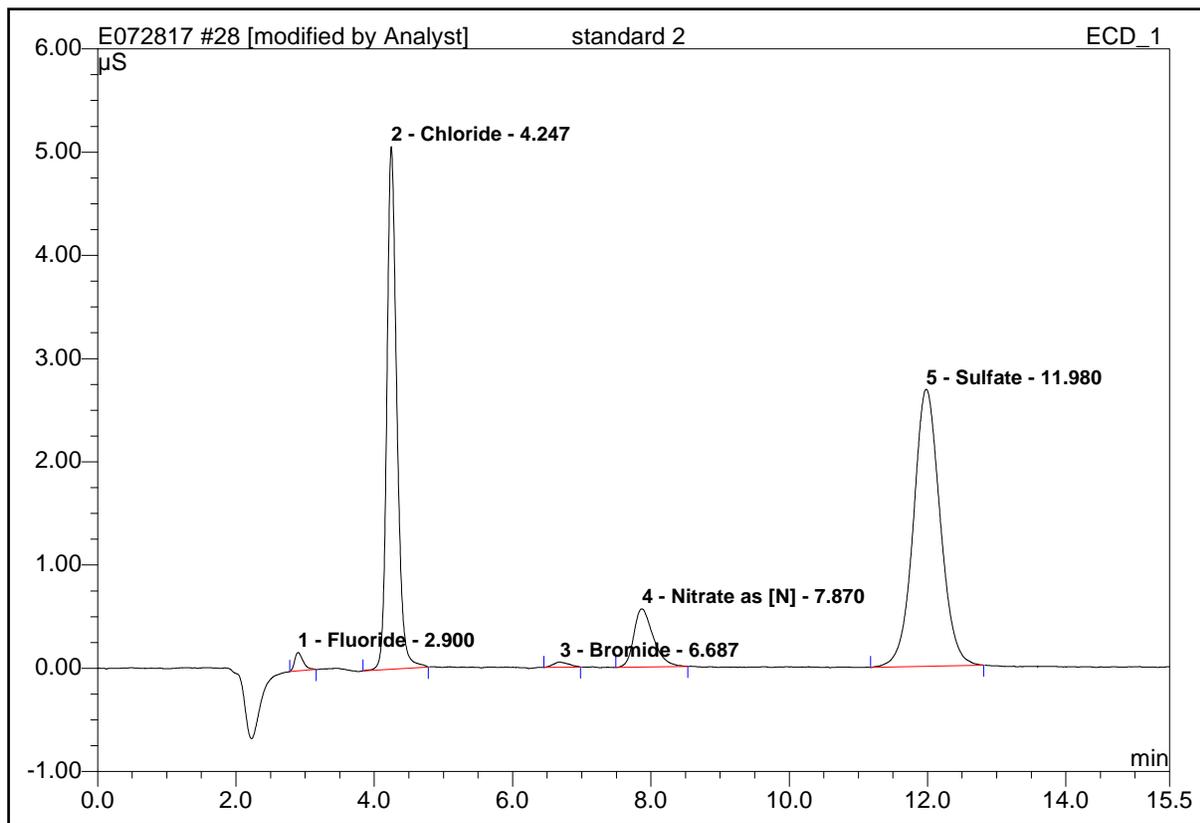
By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

28 standard 2			
Sample Name:	standard 2	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:59	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.177	0.025	1.09	0.098	BMB*
2	4.25	Chloride	5.064	0.848	37.30	4.159	BMB*
3	6.69	Bromide	0.050	0.013	0.57	0.195	BMB
4	7.87	Nitrate as [N]	0.564	0.184	8.07	0.473	BMB*
5	11.98	Sulfate	2.684	1.204	52.95	8.744	BMB
Total:			8.538	2.274	100.00	13.670	

modified on: 07.24.17 11:55 By: OLH/EMW/JSW

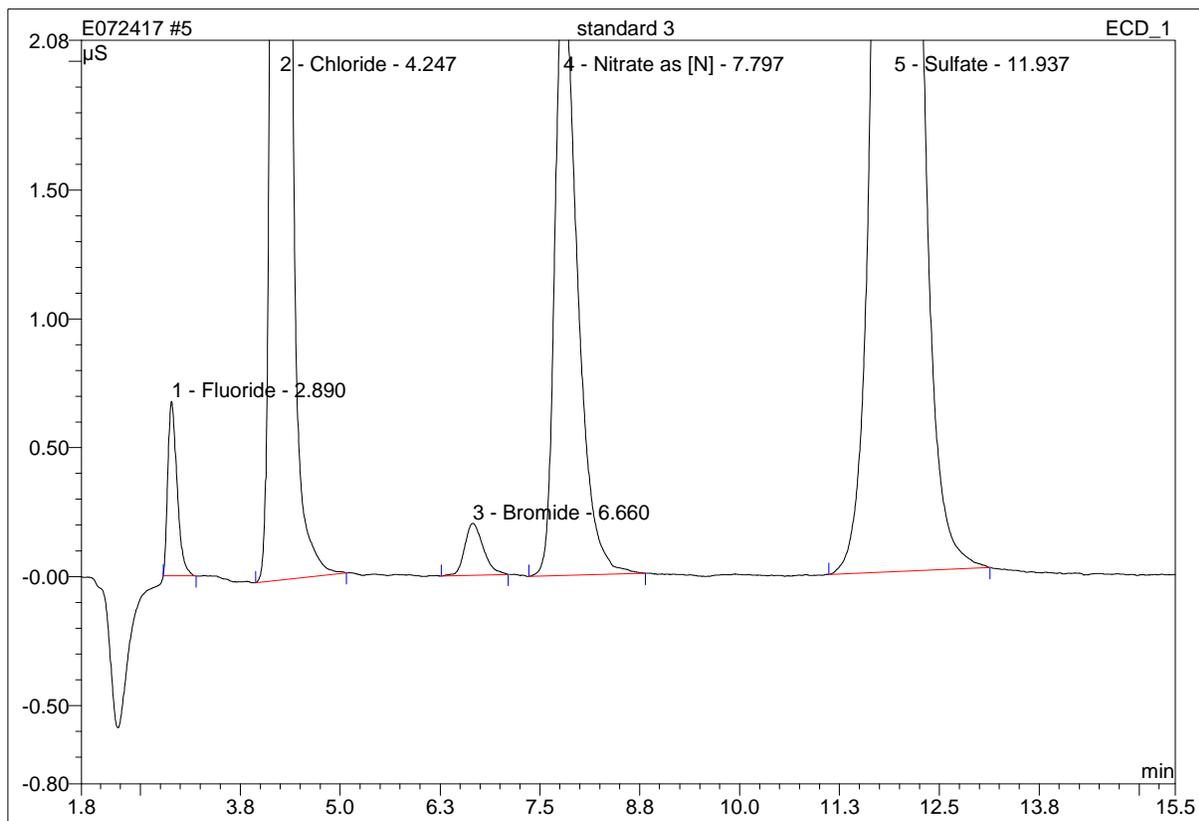
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.

5 standard 3			
Sample Name:	standard 3	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:17	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.677	0.091	0.91	0.394	BMB
2	4.25	Chloride	23.877	3.808	38.16	18.187	BMB
3	6.66	Bromide	0.202	0.055	0.55	0.793	BMB
4	7.80	Nitrate as [N]	2.352	0.766	7.68	1.945	BMB
5	11.94	Sulfate	11.962	5.261	52.71	36.954	BMB
Total:			39.070	9.981	100.00	58.273	

modified on: n.a.

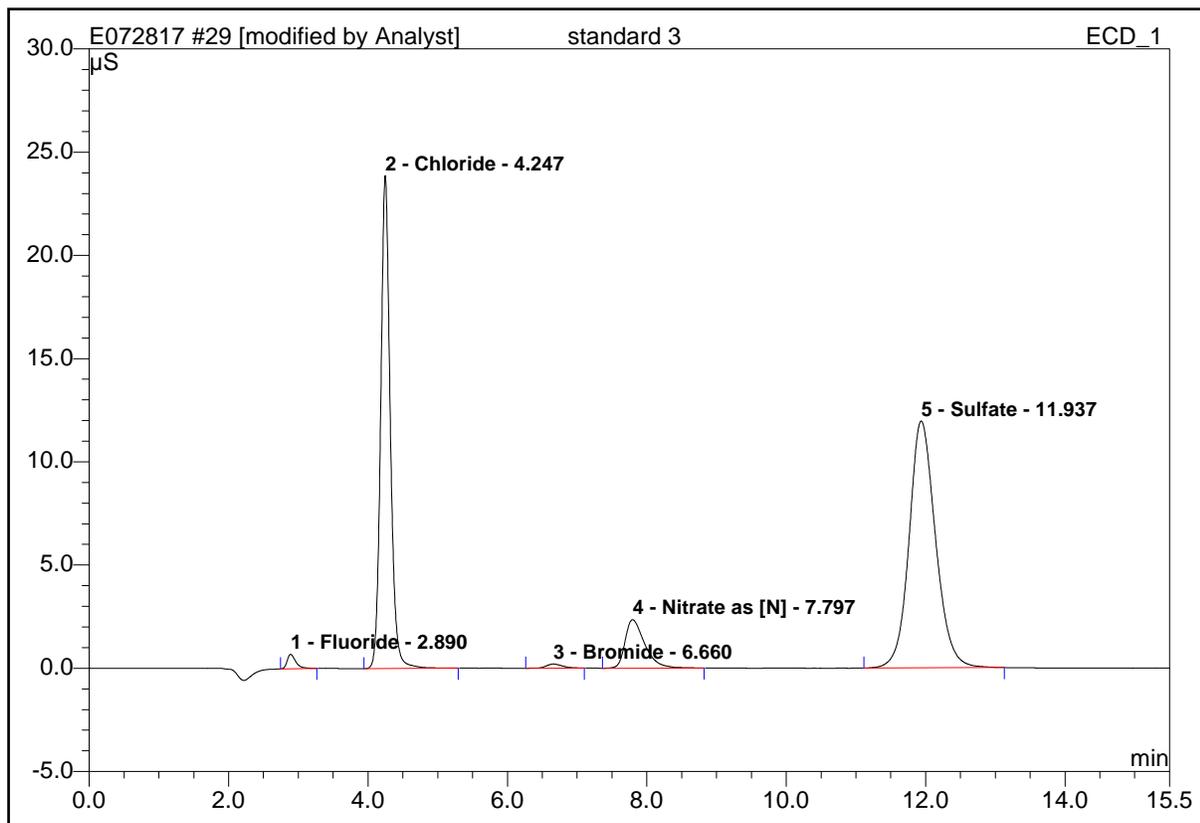
By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

29 standard 3			
Sample Name:	standard 3	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:17	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.701	0.099	0.99	0.394	BMB*
2	4.25	Chloride	23.881	3.818	38.19	18.152	BMB*
3	6.66	Bromide	0.202	0.055	0.55	0.791	BMB
4	7.80	Nitrate as [N]	2.352	0.766	7.66	1.939	BMB
5	11.94	Sulfate	11.962	5.261	52.61	36.926	BMB
Total:			39.098	9.999	100.00	58.202	

modified on: 07.24.17 11:55 By: OLH/EMW/JSW

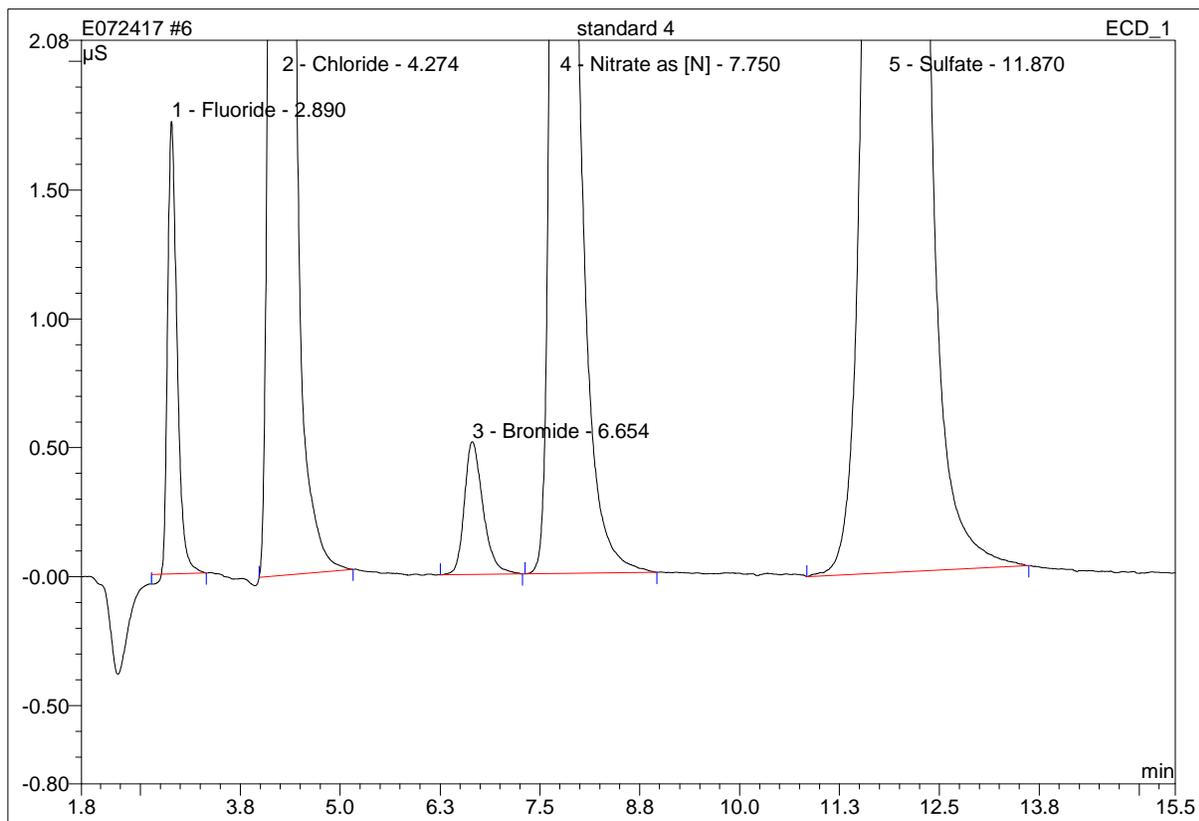
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M = Main
R = Rider
BMB = This peak type is for resolved peaks.

6 standard 4			
Sample Name:	standard 4	Injection Volume:	20.0
Vial Number:	21	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:35	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	1.757	0.239	0.85	0.986	MB
2	4.27	Chloride	68.015	10.902	38.77	49.873	BMB
3	6.65	Bromide	0.515	0.140	0.50	2.015	BMB
4	7.75	Nitrate as [N]	6.351	2.039	7.25	4.968	BMB
5	11.87	Sulfate	33.906	14.798	52.63	99.132	BMB
Total:			110.543	28.118	100.00	156.973	

modified on: n.a.

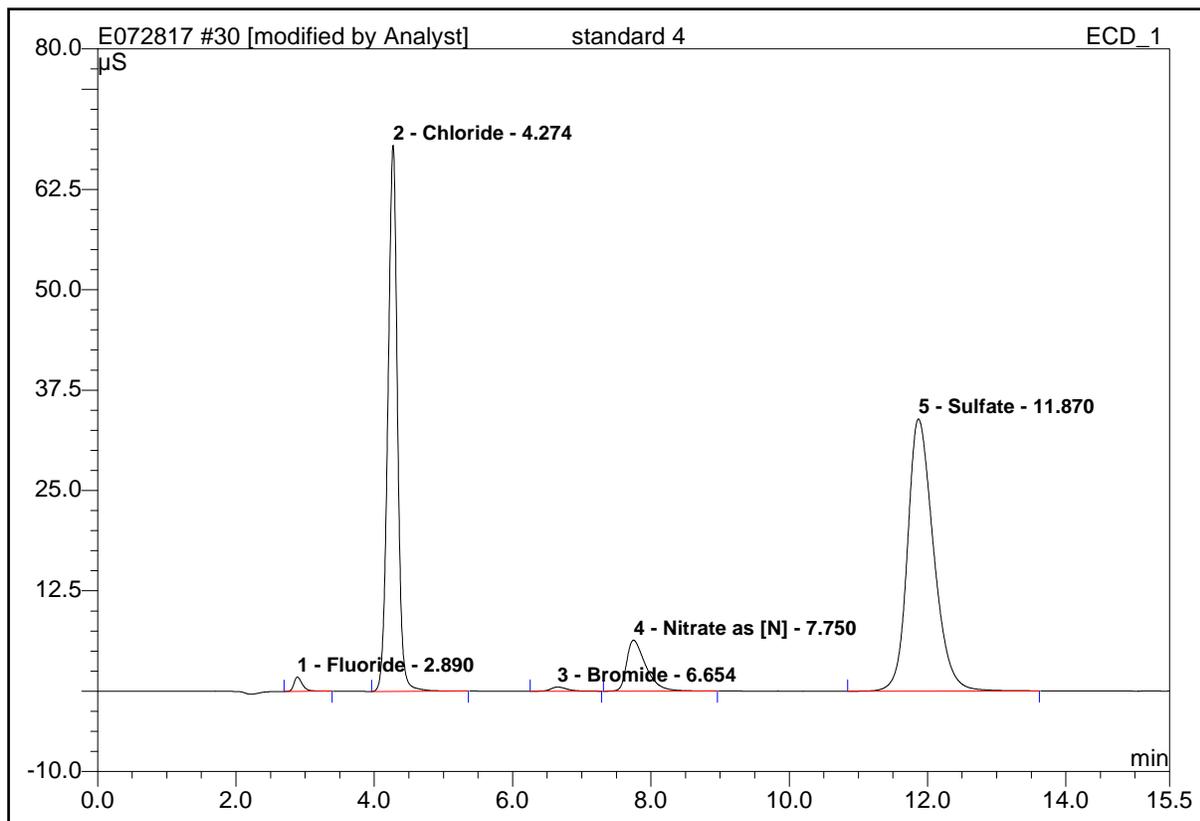
By: OLH/EMW/JSW

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B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

30 standard 4			
Sample Name:	standard 4	Injection Volume:	20.0
Vial Number:	21	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:35	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	1.781	0.252	0.90	0.991	BMB*
2	4.27	Chloride	68.039	10.929	38.81	49.902	BMB*
3	6.65	Bromide	0.515	0.140	0.50	2.013	BMB
4	7.75	Nitrate as [N]	6.351	2.039	7.24	4.963	BMB
5	11.87	Sulfate	33.906	14.798	52.55	99.135	BMB
Total:			110.592	28.159	100.00	157.004	

modified on: 07.24.17 11:55 By: OLH/EMW/JSW

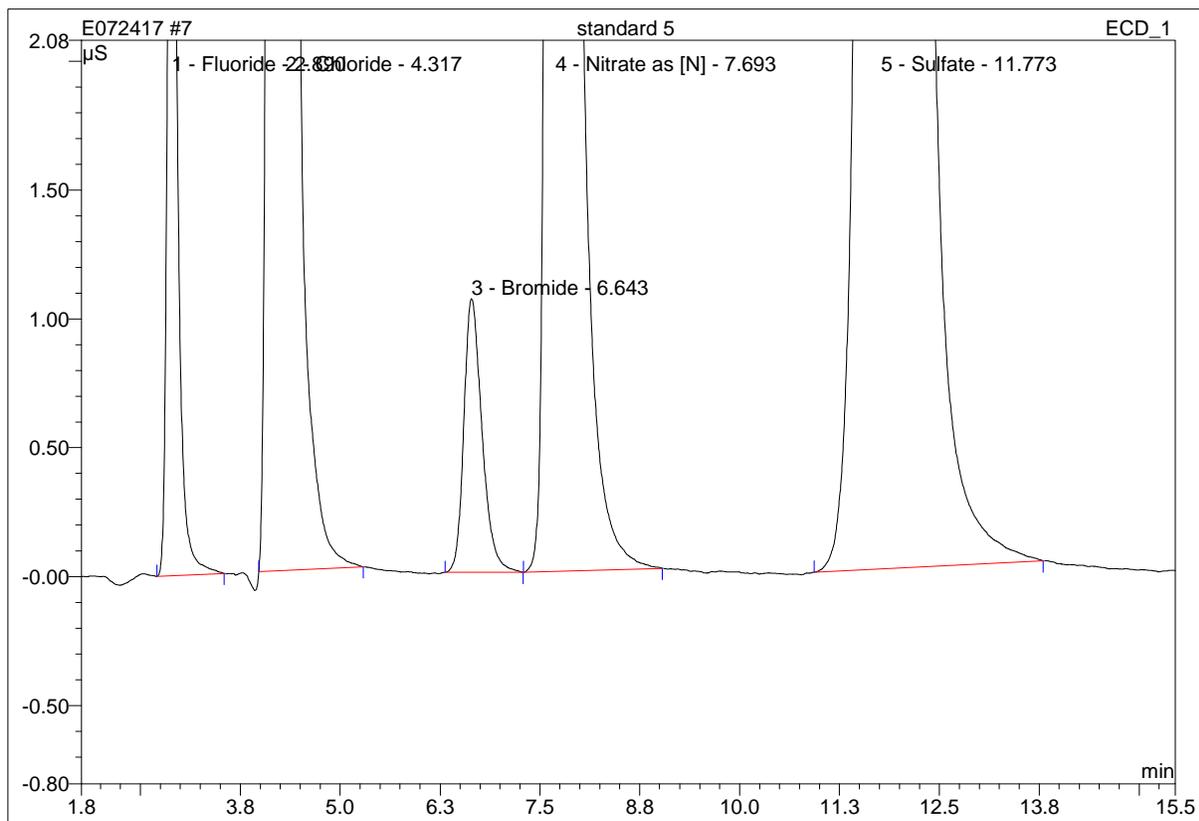
* = Manual integrations due to peak, rider, or baseline errors.

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M = Main
R = Rider
BMB = This peak type is for resolved peaks.

7 standard 5			
Sample Name:	standard 5	Injection Volume:	20.0
Vial Number:	21	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:53	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	3.665	0.525	0.84	2.060	BMB
2	4.32	Chloride	140.273	24.201	38.54	104.007	BMB
3	6.64	Bromide	1.062	0.280	0.45	4.009	BMB
4	7.69	Nitrate as [N]	14.059	4.456	7.10	10.168	BMB
5	11.77	Sulfate	74.169	33.326	53.08	207.483	BMB
Total:			233.227	62.788	100.00	327.727	

modified on: n.a.

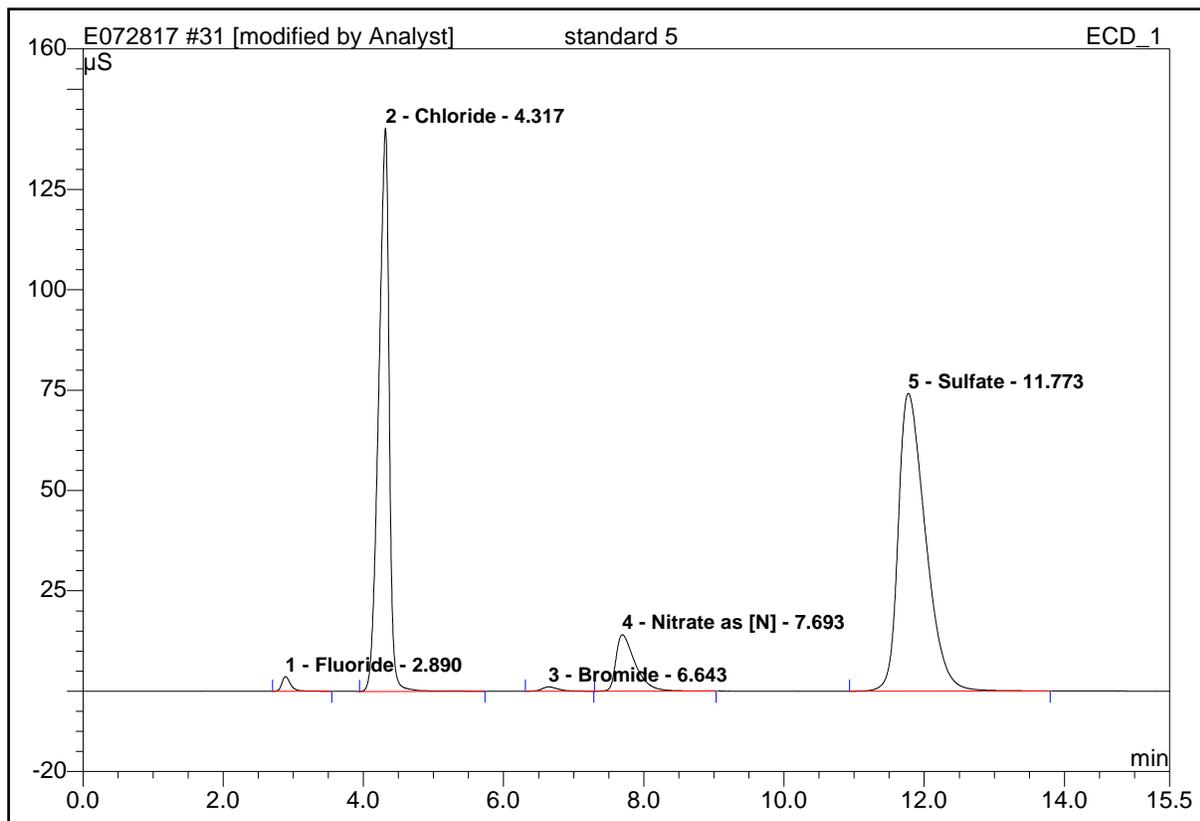
By: OLH/EMW/JSW

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B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

31 standard 5			
Sample Name:	standard 5	Injection Volume:	20.0
Vial Number:	21	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:53	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	3.665	0.525	0.84	2.021	BMB
2	4.32	Chloride	140.333	24.278	38.62	104.170	BMB*
3	6.64	Bromide	1.062	0.280	0.45	4.015	BMB
4	7.69	Nitrate as [N]	14.059	4.456	7.09	10.168	BMB
5	11.77	Sulfate	74.169	33.326	53.01	207.491	BMB
Total:			233.288	62.866	100.00	327.865	

modified on: 07.24.17 11:55 By: OLH/EMW/JSW

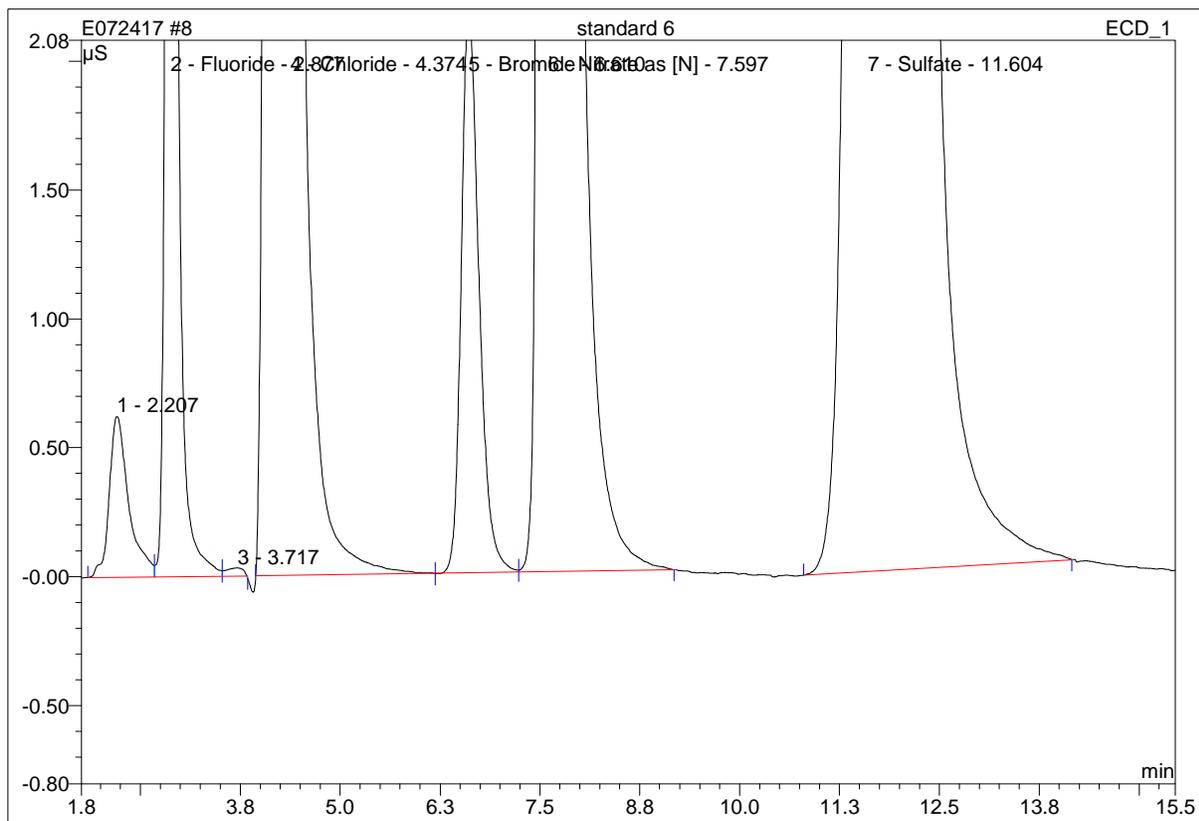
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b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.

8 standard 6			
Sample Name:	standard 6	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 10:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



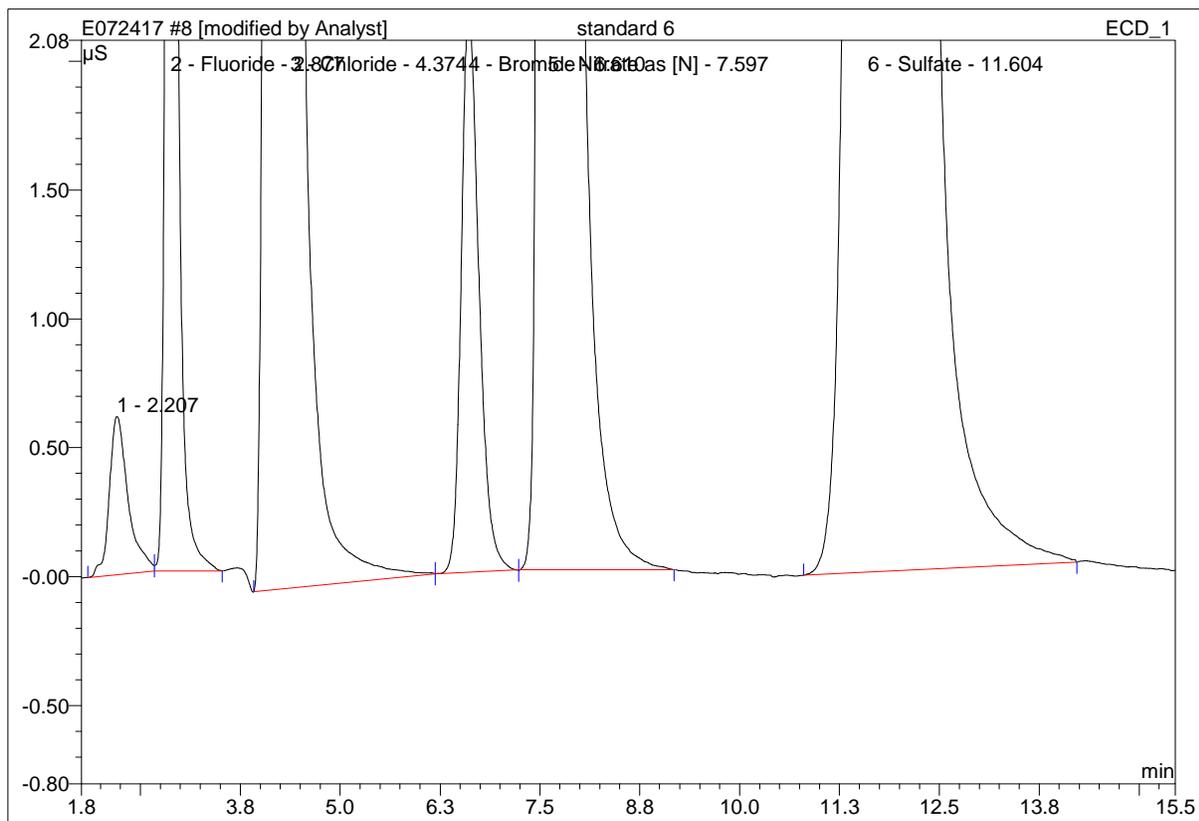
No.	Ret.Time min	Peak Name	Height μ S	Area μ S*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.625	0.177	0.13	n.a.	BM
2	2.88	Fluoride	7.363	1.098	0.82	3.978	M
3	3.72	n.a.	0.032	0.008	0.01	n.a.	M
4	4.37	Chloride	249.395	50.974	37.98	198.482	BM
5	6.61	Bromide	2.197	0.565	0.42	7.993	M
6	7.60	Nitrate as [N]	30.938	9.771	7.28	19.941	MB
7	11.60	Sulfate	146.202	71.635	53.37	397.316	BMB
Total:			436.752	134.228	100.00	627.710	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

8 standard 6			
Sample Name:	standard 6	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 10:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



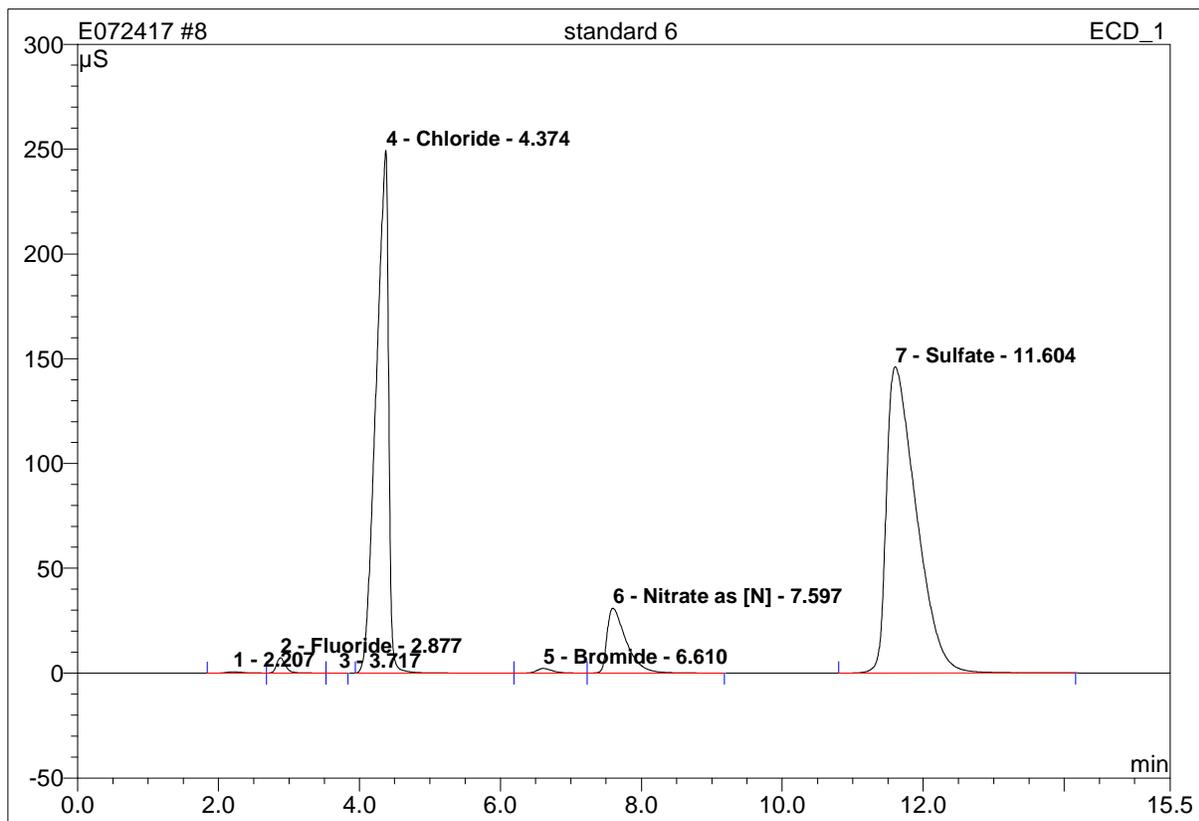
No.	Ret.Time min	Peak Name	Height μ S	Area μ S*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.614	0.168	0.12	n.a.	BM *
2	2.88	Fluoride	7.341	1.080	0.80	3.993	MB*
3	4.37	Chloride	249.444	51.045	38.02	198.413	BMb*
4	6.61	Bromide	2.195	0.562	0.42	7.991	bM *
5	7.60	Nitrate as [N]	30.931	9.762	7.27	19.942	MB*
6	11.60	Sulfate	146.205	71.653	53.37	397.316	BMB*
Total:			436.730	134.269	100.00	627.655	

modified on: 07.24.17 11:56 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

8 standard 6			
Sample Name:	standard 6	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 10:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.625	0.177	0.13	n.a.	BM
2	2.88	Fluoride	7.363	1.098	0.82	3.978	M
3	3.72	n.a.	0.032	0.008	0.01	n.a.	M
4	4.37	Chloride	249.395	50.974	37.98	198.482	BM
5	6.61	Bromide	2.197	0.565	0.42	7.993	M
6	7.60	Nitrate as [N]	30.938	9.771	7.28	19.941	MB
7	11.60	Sulfate	146.202	71.635	53.37	397.316	BMB
Total:			436.752	134.228	100.00	627.710	

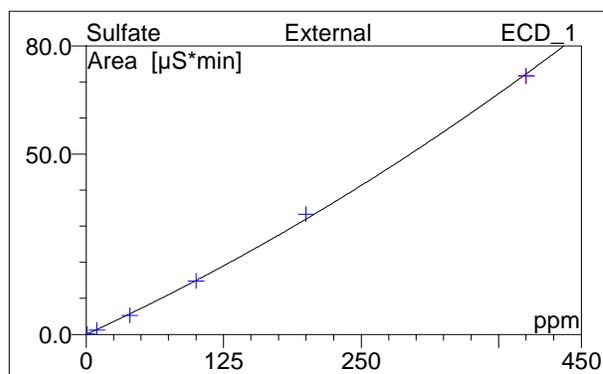
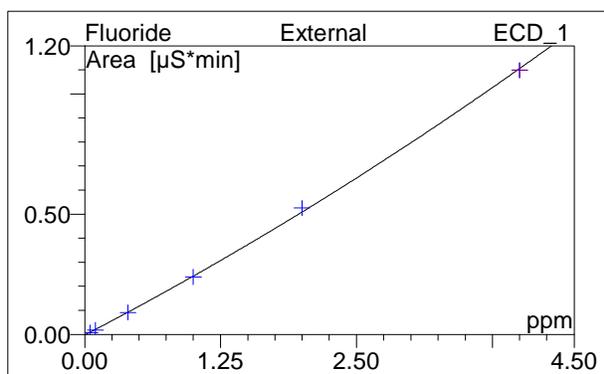
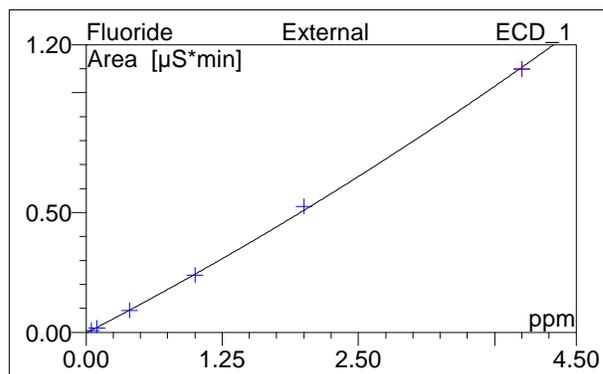
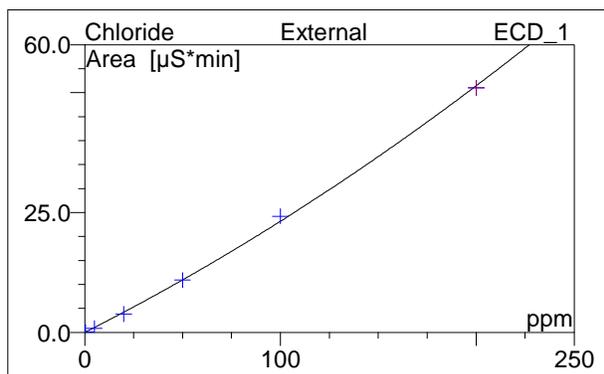
modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

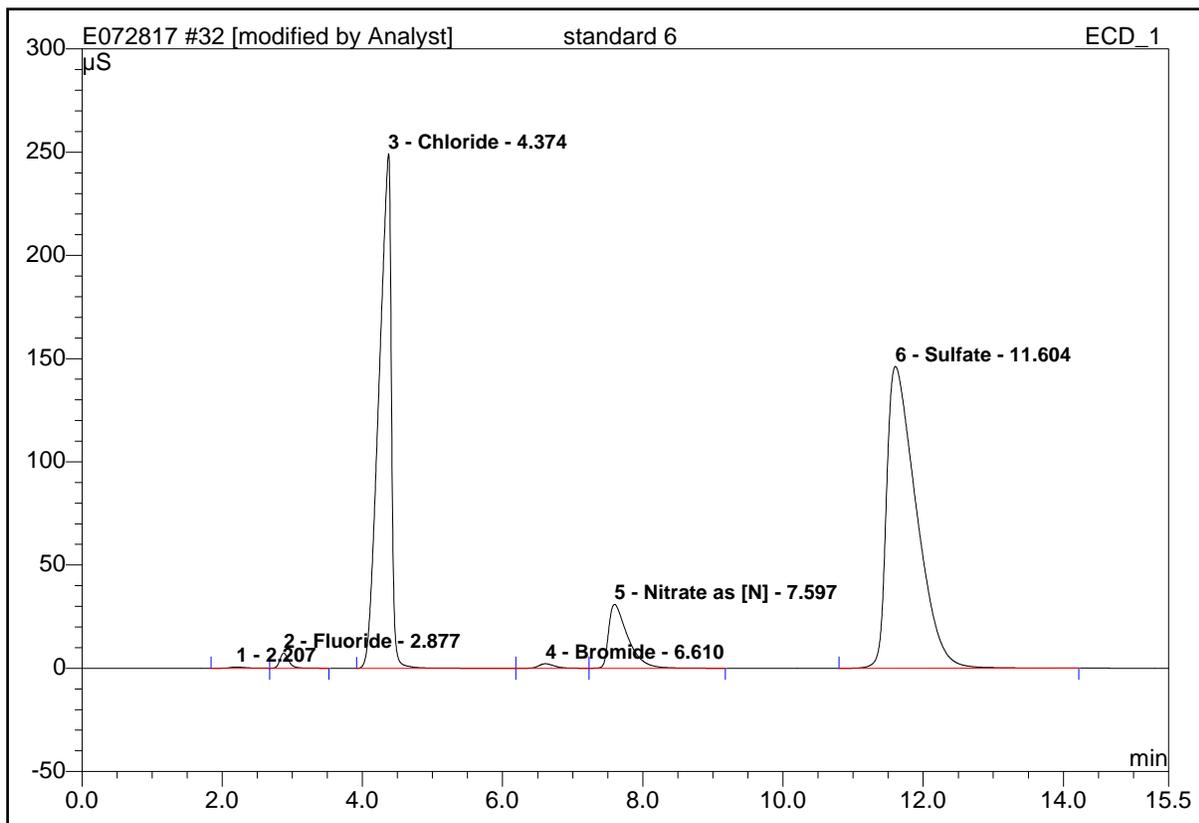
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

8 standard 6	
Sample Name: standard 6	Injection Volume: 20.0
Vial Number: 20	Channel: ECD_1
Sample Type: standard	Wavelength: n.a.
Control Program: IC5	Bandwidth: n.a.
Quantif. Method: IC5 ANION	Dilution Factor: 1.0000
Recording Time: 7/24/2017 10:11	Sample Weight: 1.0000
Run Time (min): 15.50	Sample Amount: 1.0000



No.	Ret.Time min	Peak Name	Cal.Type	Points	Coeff.Det. %	Offset	Slope	Curve
1	2.21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	2.88	Fluoride	XA0QOff	6	99.9058	-0.0029	0.2347	0.0106
3	3.72	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	4.37	Chloride	XA0QOff	7	99.8803	-0.0329	0.2066	0.0003
5	6.61	Bromide	XA0QOff	6	99.9926	-0.0005	0.0693	0.0002
6	7.60	Nitrate as [N]	XA0QOff	6	99.9820	-0.0022	0.3846	0.0053
7	11.60	Sulfate	XA0QOff	6	99.9094	-0.0294	0.1393	0.0001
Average:					99.9340	-0.0136	0.2069	0.0033

32 standard 6			
Sample Name:	standard 6	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 10:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.614	0.168	0.12	n.a.	BM *
2	2.88	Fluoride	7.341	1.080	0.80	3.993	MB*
3	4.37	Chloride	249.444	51.045	38.02	198.413	BMB*
4	6.61	Bromide	2.195	0.562	0.42	7.991	bM *
5	7.60	Nitrate as [N]	30.931	9.762	7.27	19.942	MB*
6	11.60	Sulfate	146.205	71.653	53.37	397.316	BMB*
Total:			436.730	134.269	100.00	627.655	

modified on: 07.24.17 11:56 By: OLH/EMW/JSW

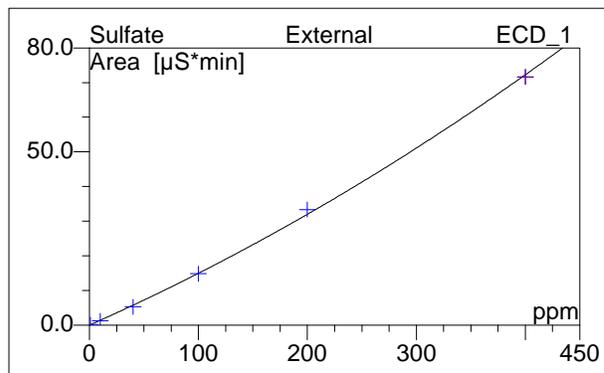
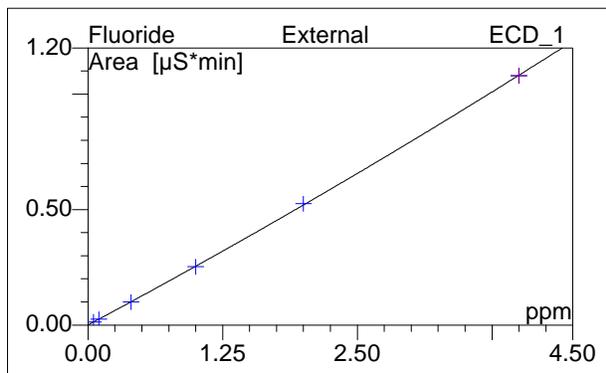
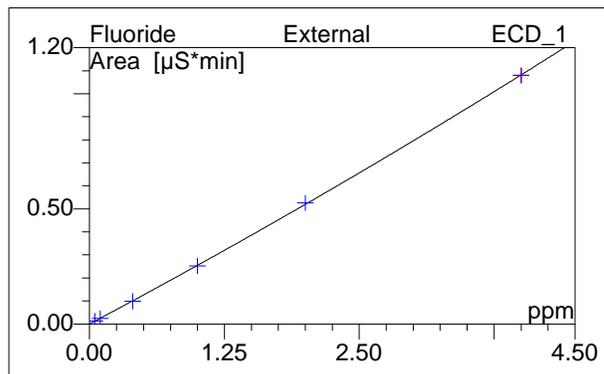
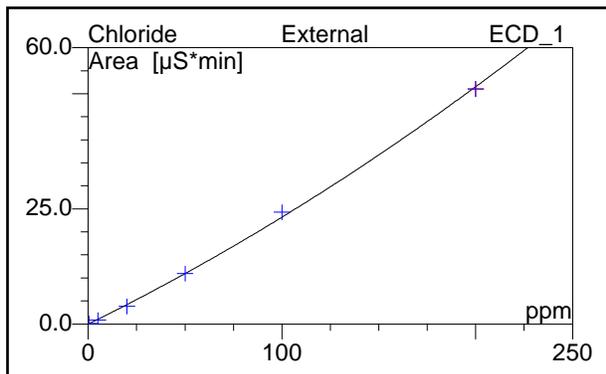
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R = Rider
BMB = This peak type is for resolved peaks.

32 standard 6

<p>Sample Name: standard 6 Vial Number: 20 Sample Type: standard Control Program: IC5 Quantif. Method: IC5 ANION Recording Time: 7/24/2017 10:11 Run Time (min): 15.50</p>	<p>Injection Volume: 20.0 Channel: ECD_1 Wavelength: n.a. Bandwidth: n.a. Dilution Factor: 1.0000 Sample Weight: 1.0000 Sample Amount: 1.0000</p>
---	--



No.	Ret.Time min	Peak Name	Cal.Type	Points	Coeff.Det. %	Offset	Slope	Curve
1	2.21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	2.88	Fluoride	XA0QOff	6	99.9916	0.0003	0.2491	0.0053
3	4.37	Chloride	XA0QOff	6	99.8735	-0.0151	0.2065	0.0003
4	6.61	Bromide	XA0QOff	6	99.9918	-0.0005	0.0696	0.0001
5	7.60	Nitrate as [N]	XA0QOff	6	99.9812	0.0005	0.3847	0.0053
6	11.60	Sulfate	XA0QOff	6	99.9097	-0.0209	0.1392	0.0001
Average:					99.9496	-0.0072	0.2098	0.0022



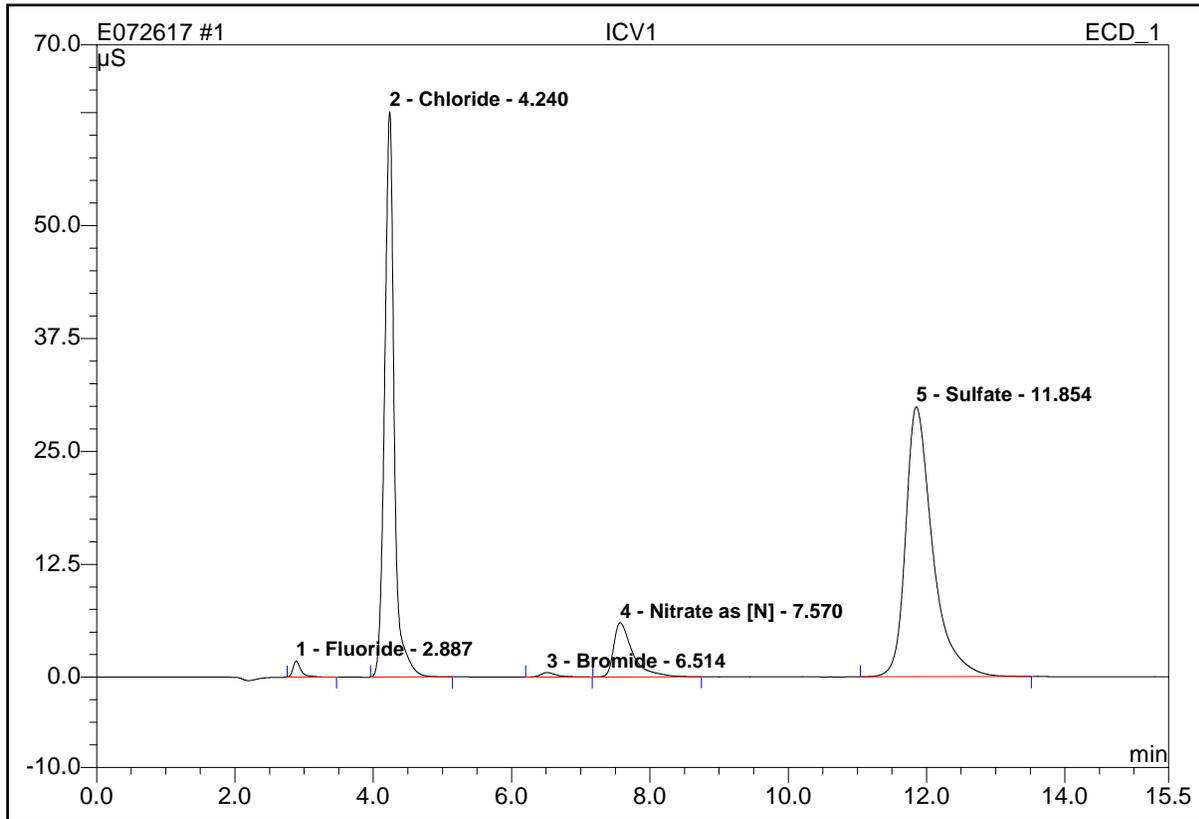
Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - ICV

1 ICV1			
Sample Name:	ICV1	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 19:12	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	1.760	0.240	0.93	0.941	BMB
2	4.24	Chloride	62.611	10.045	38.86	46.076	BMB
3	6.51	Bromide	0.483	0.126	0.49	1.818	BMB
4	7.57	Nitrate as [N]	5.988	1.906	7.37	4.657	BMB
5	11.85	Sulfate	29.889	13.531	52.35	91.163	BMB
Total:			100.731	25.848	100.00	144.655	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.



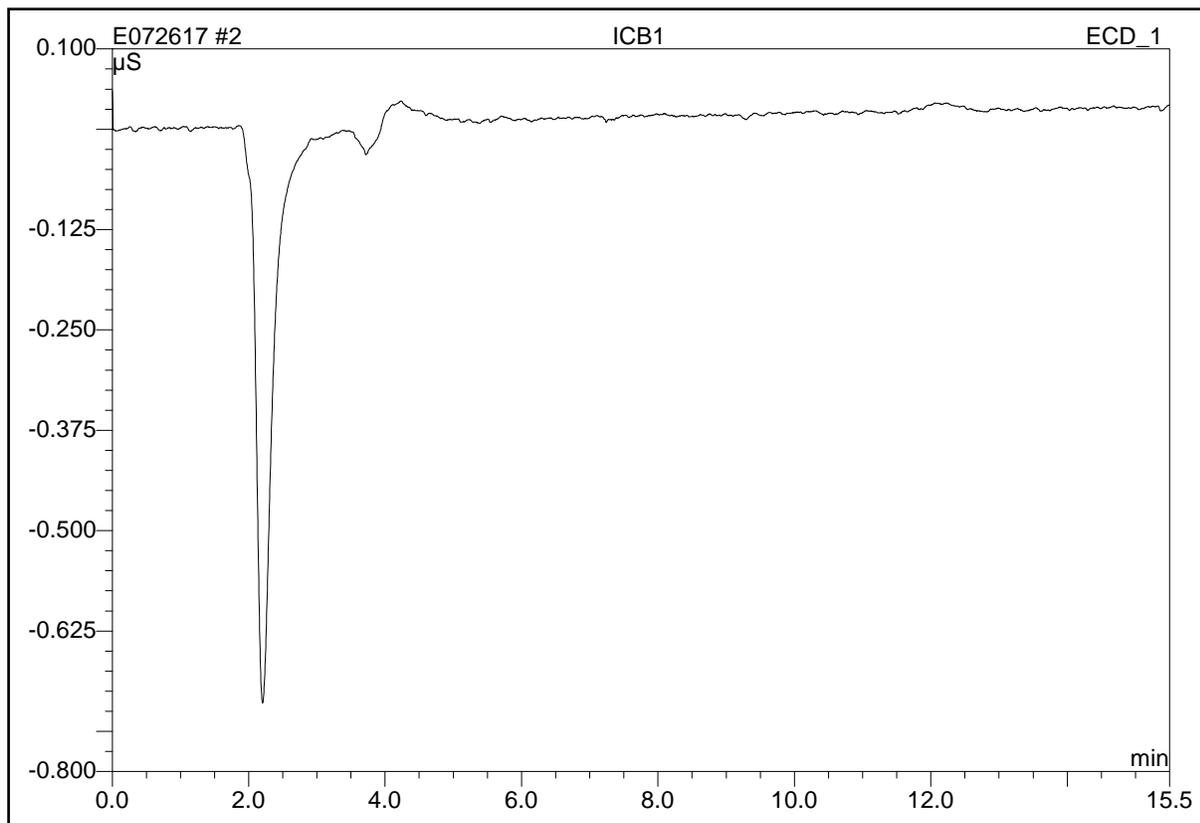
Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - ICB

2 ICB1			
Sample Name:	ICB1	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 19:30	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.



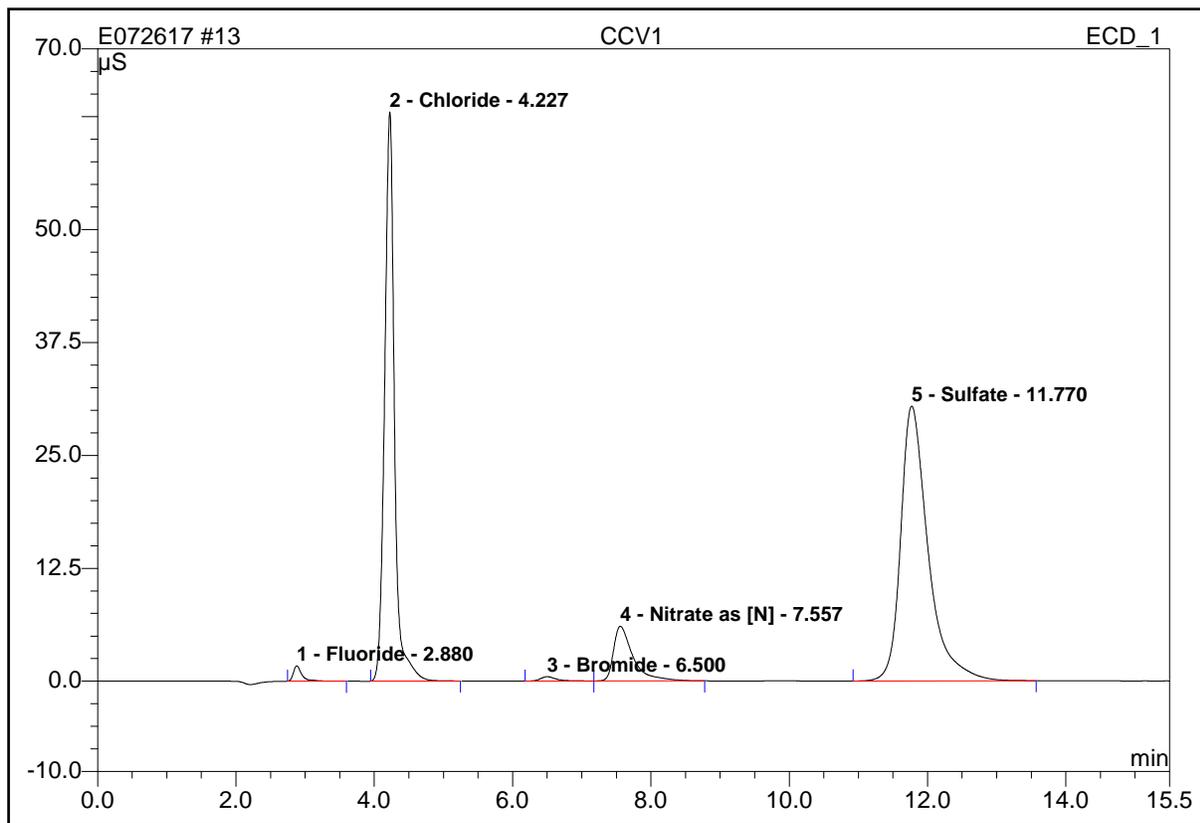
Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - CCV

13 CCV1			
Sample Name:	CCV1	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 22:46	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	1.701	0.242	0.91	0.951	BM
2	4.23	Chloride	63.039	10.383	38.88	47.543	BMB
3	6.50	Bromide	0.486	0.130	0.49	1.868	BM
4	7.56	Nitrate as [N]	6.052	1.975	7.39	4.816	MB
5	11.77	Sulfate	30.424	13.978	52.34	93.987	BMB
Total:			101.701	26.708	100.00	149.164	

modified on: n.a.

By: OLH/EMW/JSW

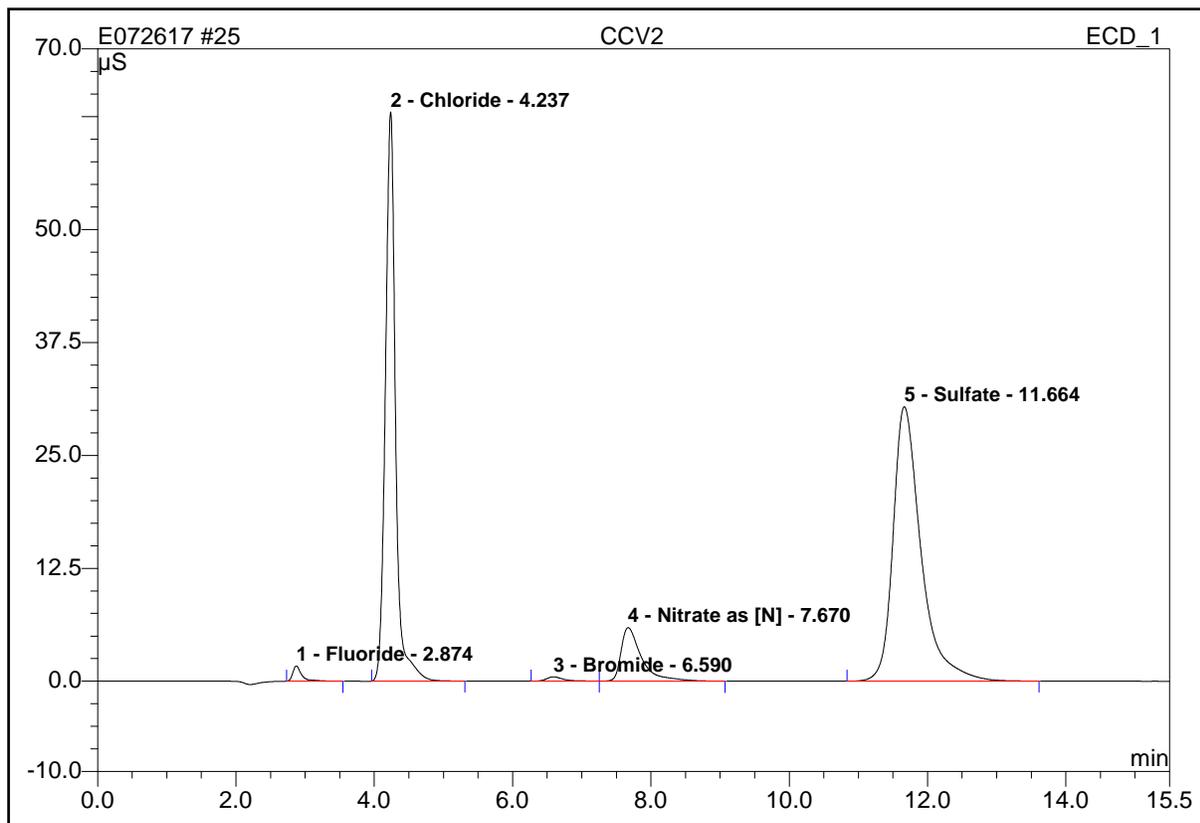
* = Manual integrations due to peak, rider, or baseline errors.

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R = Rider
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25 CCV2			
Sample Name:	CCV2	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/27/2017 2:21	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.87	Fluoride	1.682	0.250	0.91	0.982	BMB
2	4.24	Chloride	63.030	10.711	39.16	48.960	BMB
3	6.59	Bromide	0.474	0.132	0.48	1.900	BM
4	7.67	Nitrate as [N]	5.922	2.021	7.39	4.920	MB
5	11.66	Sulfate	30.394	14.234	52.05	95.599	BMB
Total:			101.503	27.348	100.00	152.362	

modified on: n.a.

By: OLH/EMW/JSW

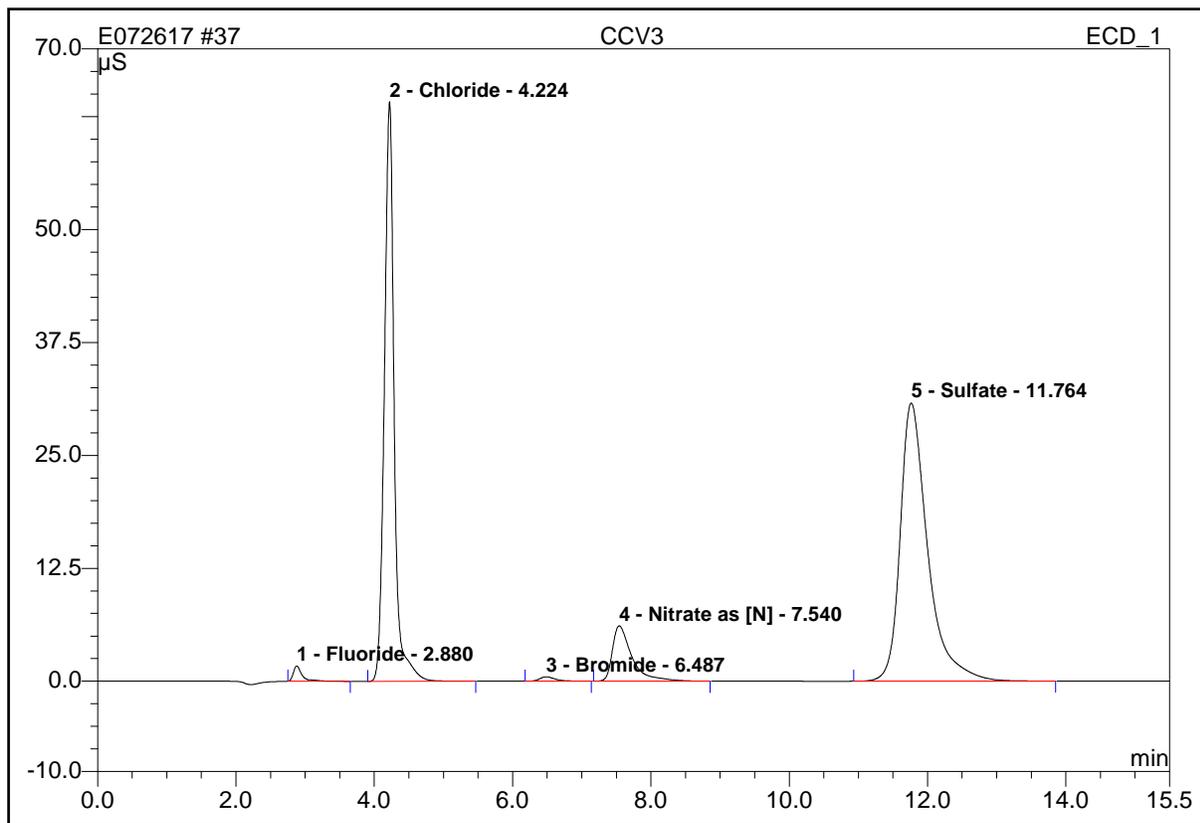
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.

37 CCV3			
Sample Name:	CCV3	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/27/2017 5:56	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	1.691	0.251	0.92	0.985	BMB
2	4.22	Chloride	64.181	10.581	38.98	48.401	BMB
3	6.49	Bromide	0.487	0.128	0.47	1.840	BMB
4	7.54	Nitrate as [N]	6.123	1.991	7.33	4.852	BMB
5	11.76	Sulfate	30.798	14.194	52.29	95.342	BMB
Total:			103.281	27.144	100.00	151.421	

modified on: n.a.

By: OLH/EMW/JSW

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B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.



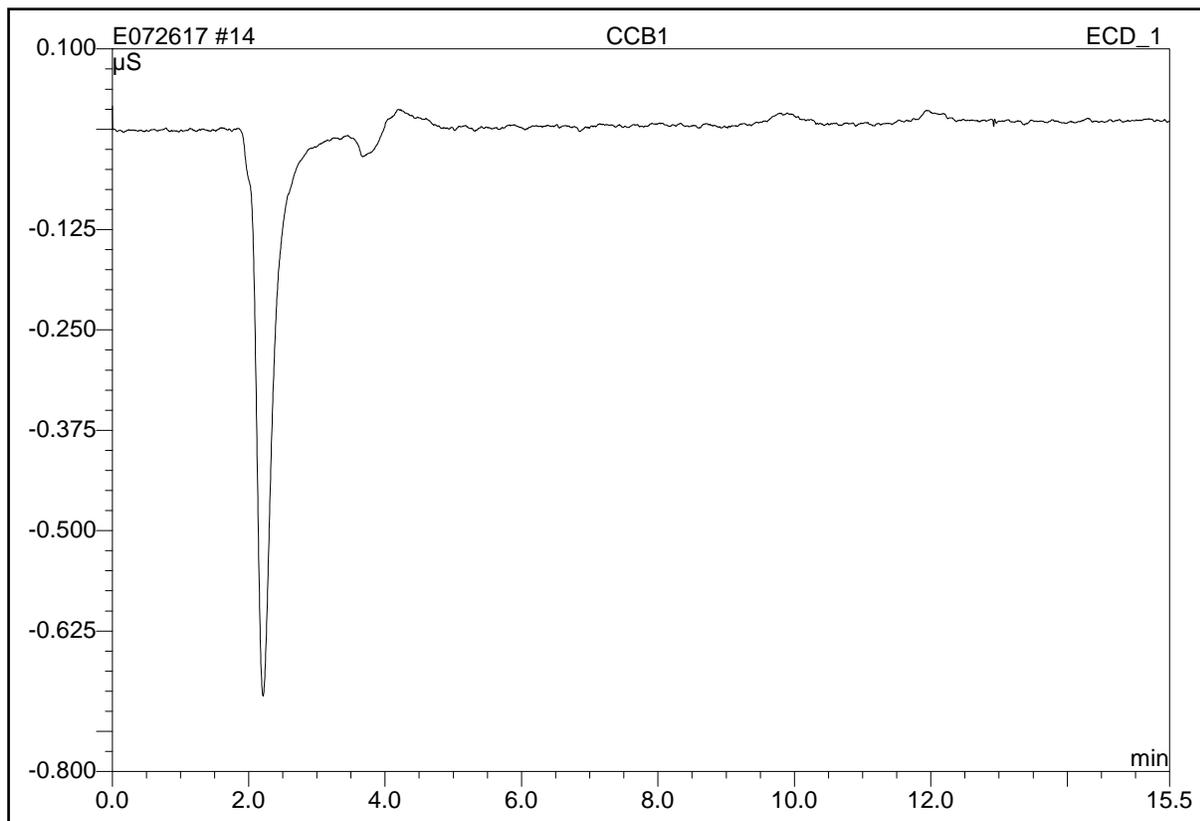
Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - CCB

14 CCB1			
Sample Name:	CCB1	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 23:04	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

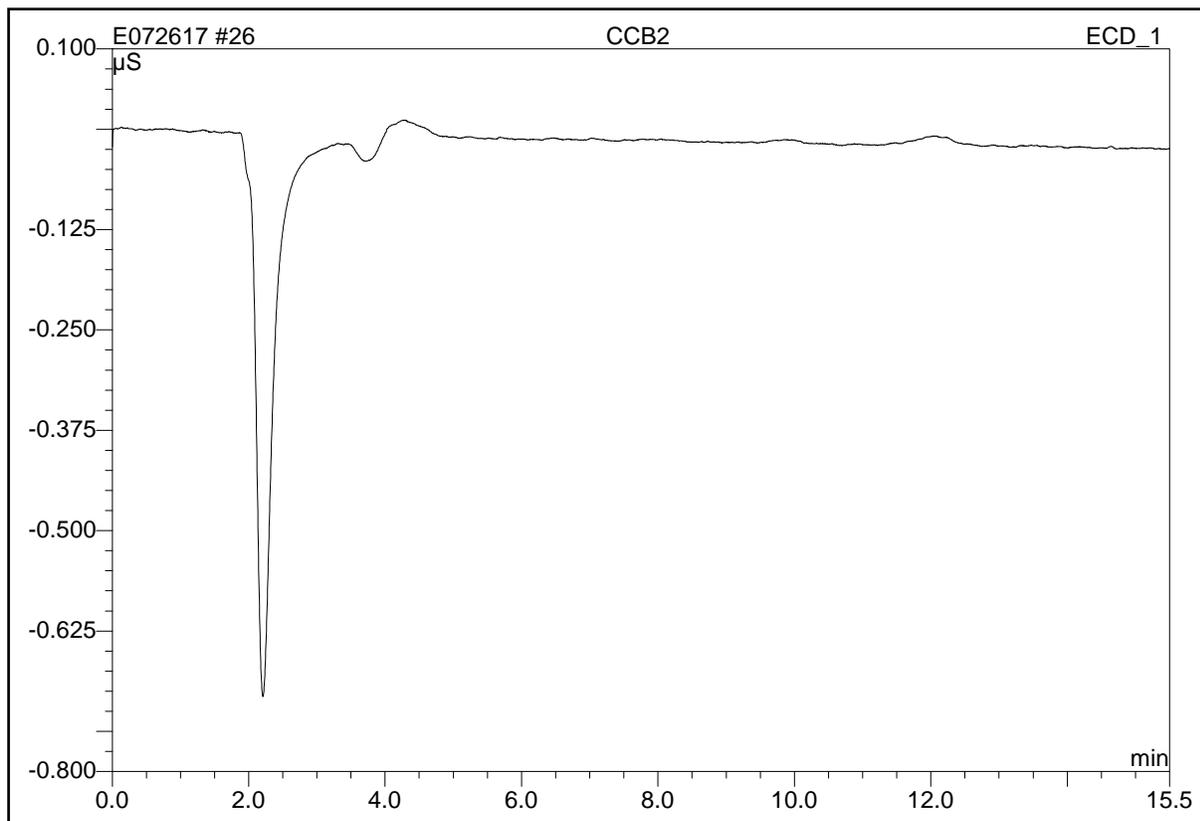
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.

26 CCB2			
Sample Name:	CCB2	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/27/2017 2:39	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

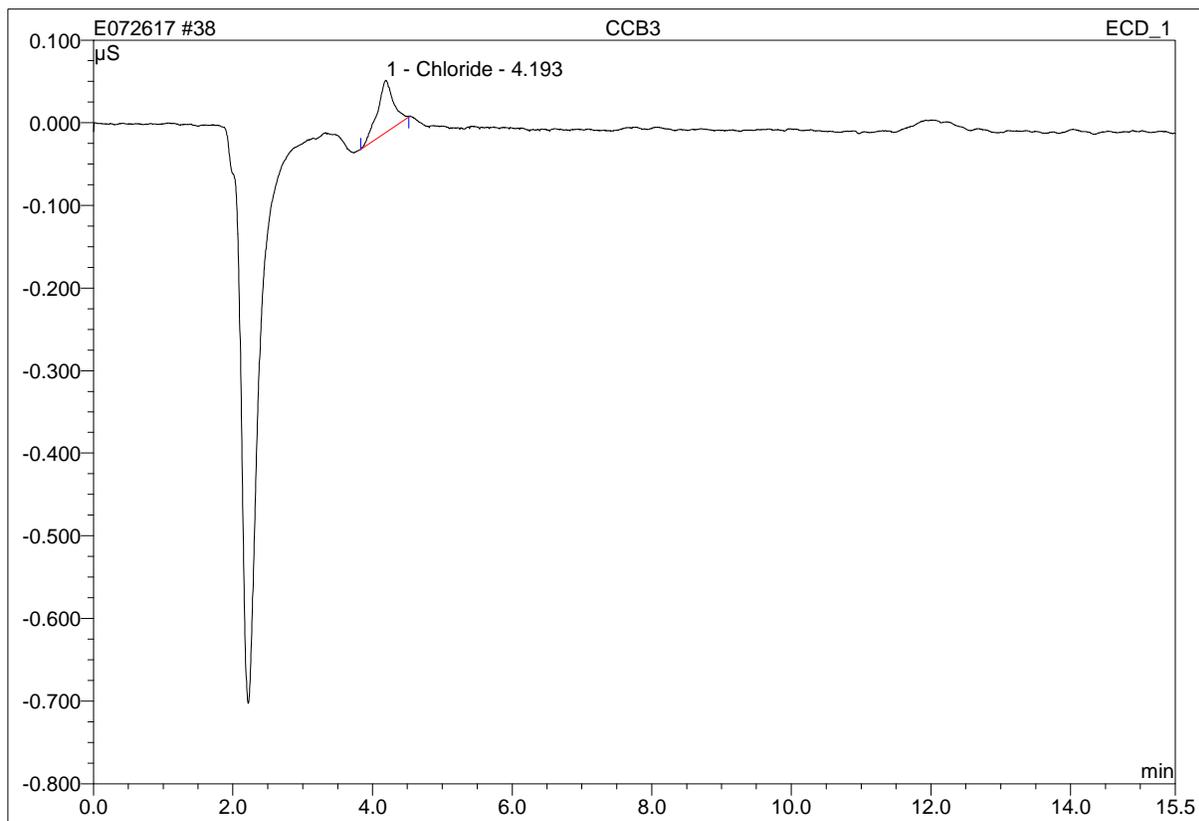
b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.

38 CCB3			
Sample Name:	CCB3	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/27/2017 6:14	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.19	Chloride	0.063	0.017	100.00	0.155	BMB
Total:			0.063	0.017	100.00	0.155	

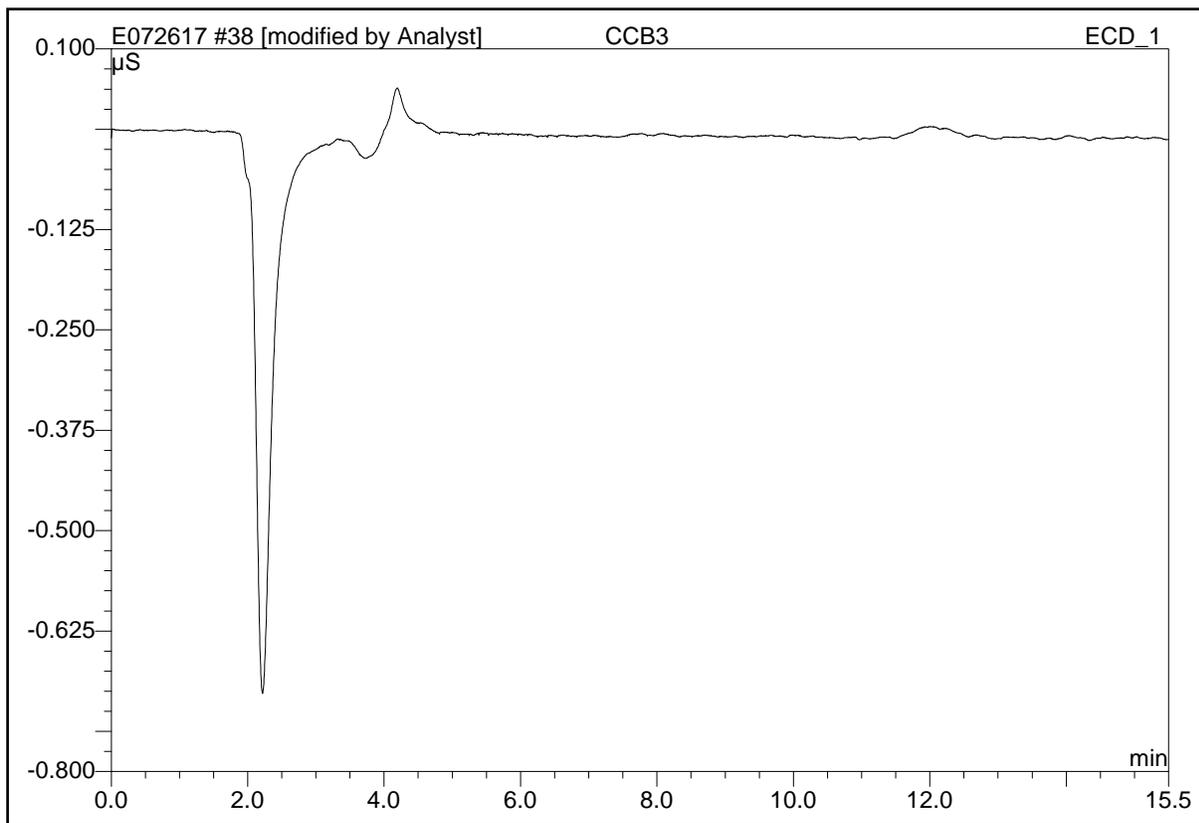
modified on: n.a.

By: OLH/EMW/JSW

- * = Manual integrations due to peak, rider or baseline error.
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- b = Baseline is below non resolved peaks drawn from peak end to peak end.
- M = Main
- R= Rider
- BMB = This peak type is for resolved peaks.

close up/Integration

38 CCB3			
Sample Name:	CCB3	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/27/2017 6:14	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: 07.27.17 09:55 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

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M = Main

R = Rider

BMB = This peak type is for resolved peaks.



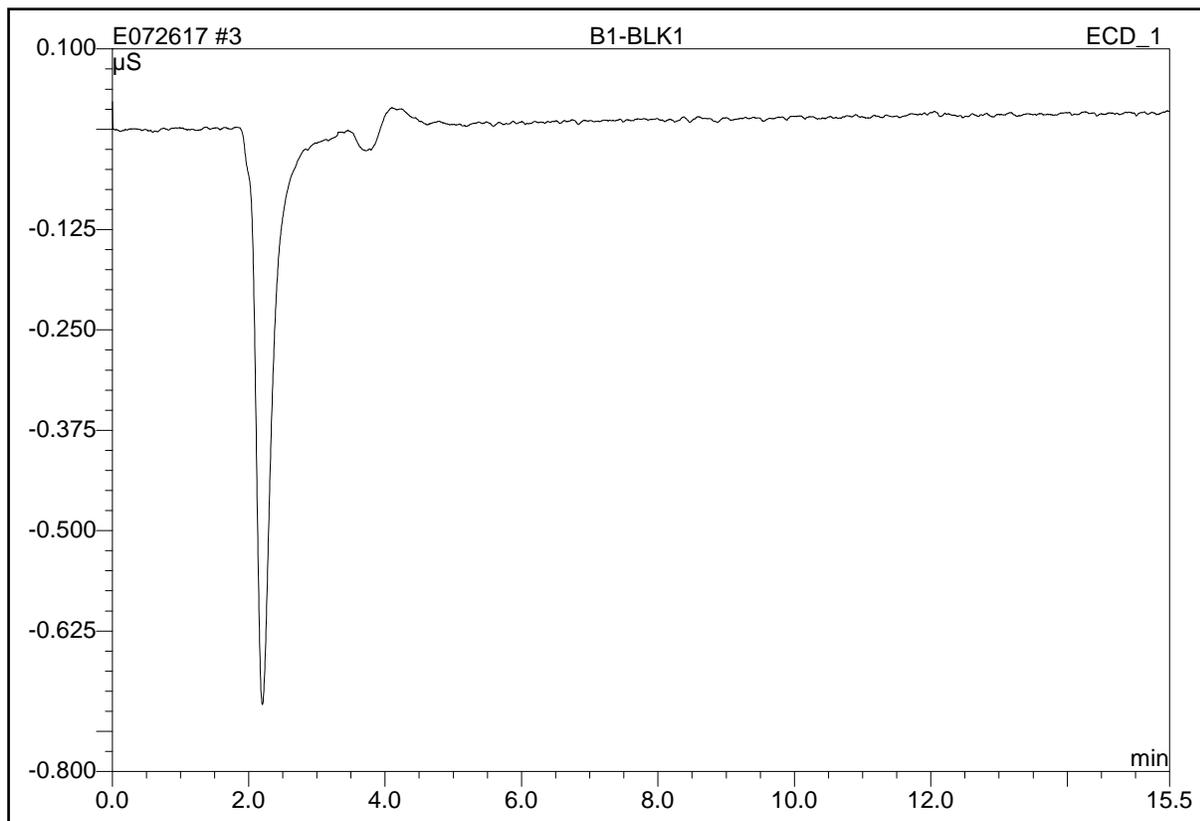
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Environmental Testing Laboratory Since 1949



Raw Data - Method Blank

3 B1-BLK1			
Sample Name:	B1-BLK1	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 19:47	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.



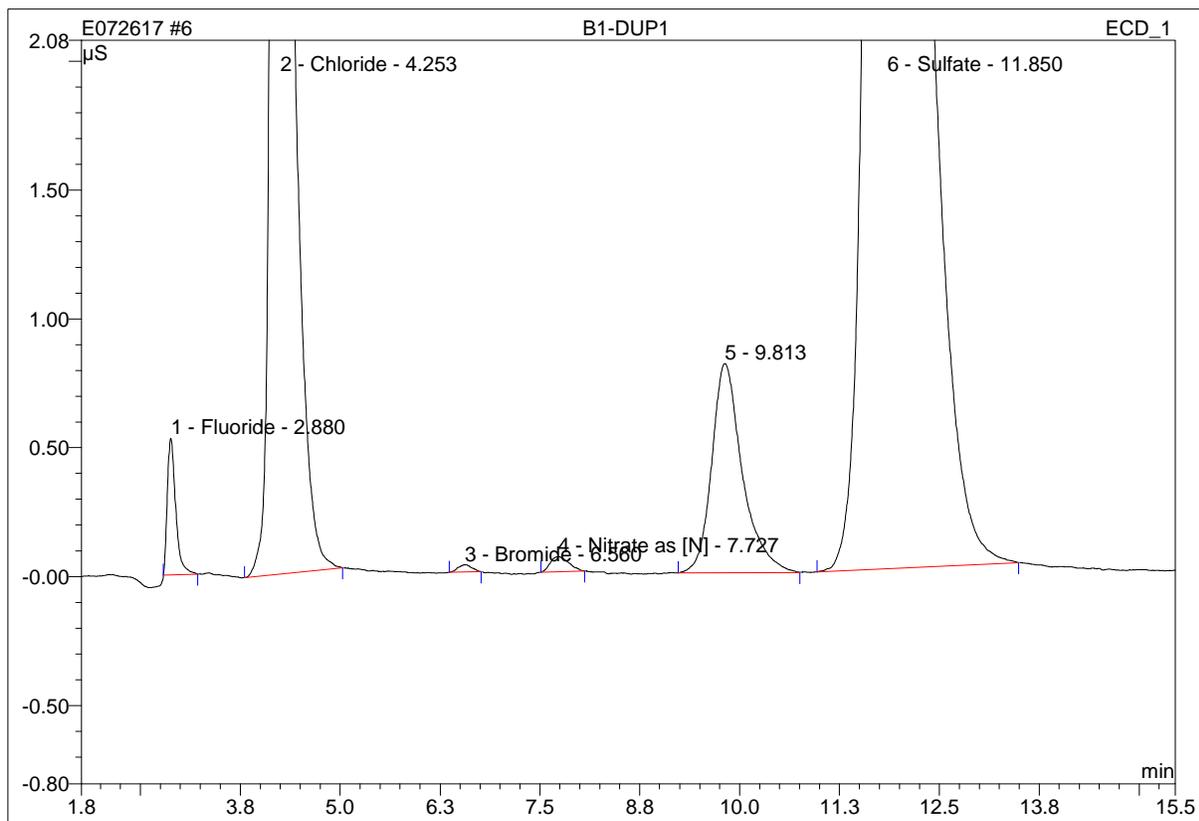
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Raw Data - Duplicate

6 B1-DUP1			
Sample Name:	B1-DUP1	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 20:41	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μ S	Area μ S*min	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	0.530	0.065	0.38	0.257	BMB
2	4.25	Chloride	31.544	4.809	28.30	22.720	BMB
3	6.56	Bromide	0.028	0.006	0.03	0.089	BMB
4	7.73	Nitrate as [N]	0.059	0.016	0.09	0.040	BMB
5	9.81	n.a.	0.812	0.360	2.12	n.a.	BMB
6	11.85	Sulfate	25.878	11.739	69.08	79.743	BMB
Total:			58.851	16.994	100.00	102.848	

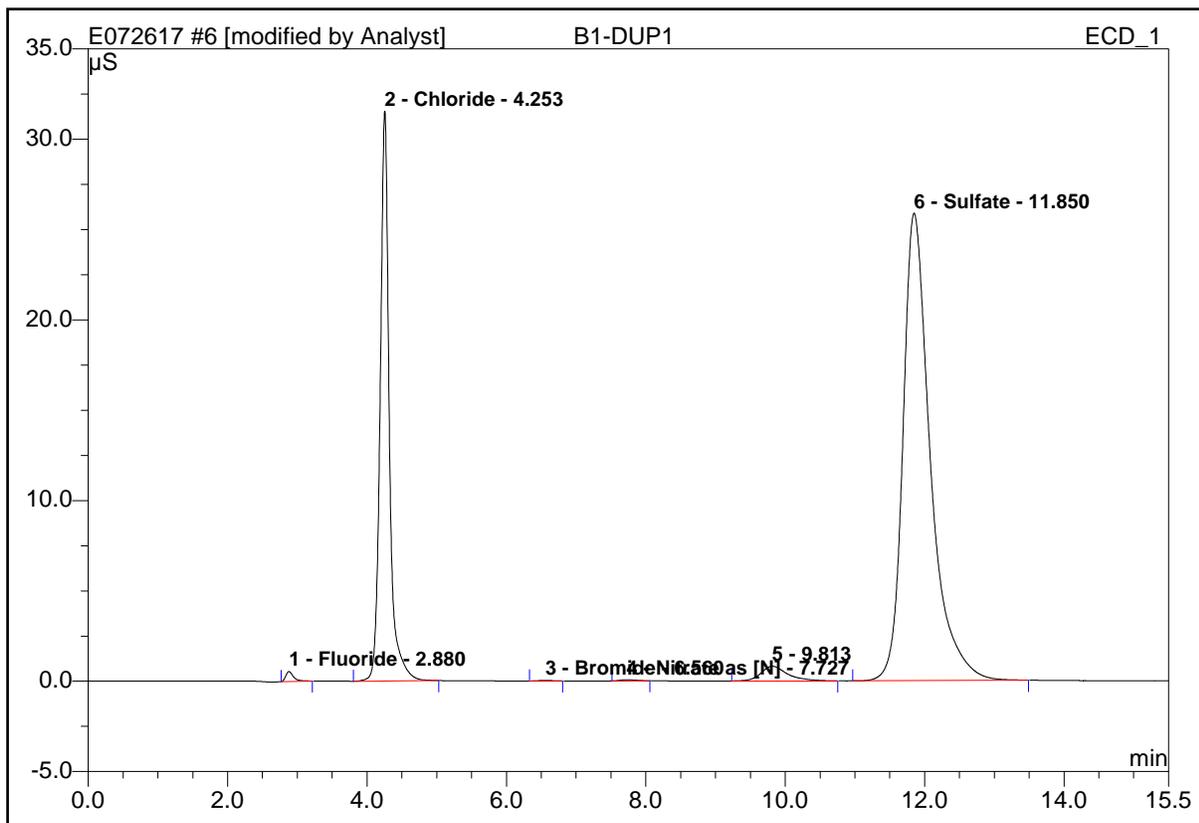
modified on: n.a.

By: OLH/EMW/JSW

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R= Rider
BMB = This peak type is for resolved peaks.

6 B1-DUP1			
Sample Name:	B1-DUP1	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 20:41	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	0.553	0.071	0.42	0.283	BMB*
2	4.25	Chloride	31.544	4.809	28.29	22.720	BMB
3	6.56	Bromide	0.031	0.007	0.04	0.106	BMB*
4	7.73	Nitrate as [N]	0.059	0.016	0.09	0.040	BMB
5	9.81	n.a.	0.812	0.360	2.12	n.a.	BMB
6	11.85	Sulfate	25.878	11.739	69.04	79.743	BMB
Total:			58.877	17.002	100.00	102.892	

modified on: 07.27.17 00:00 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.



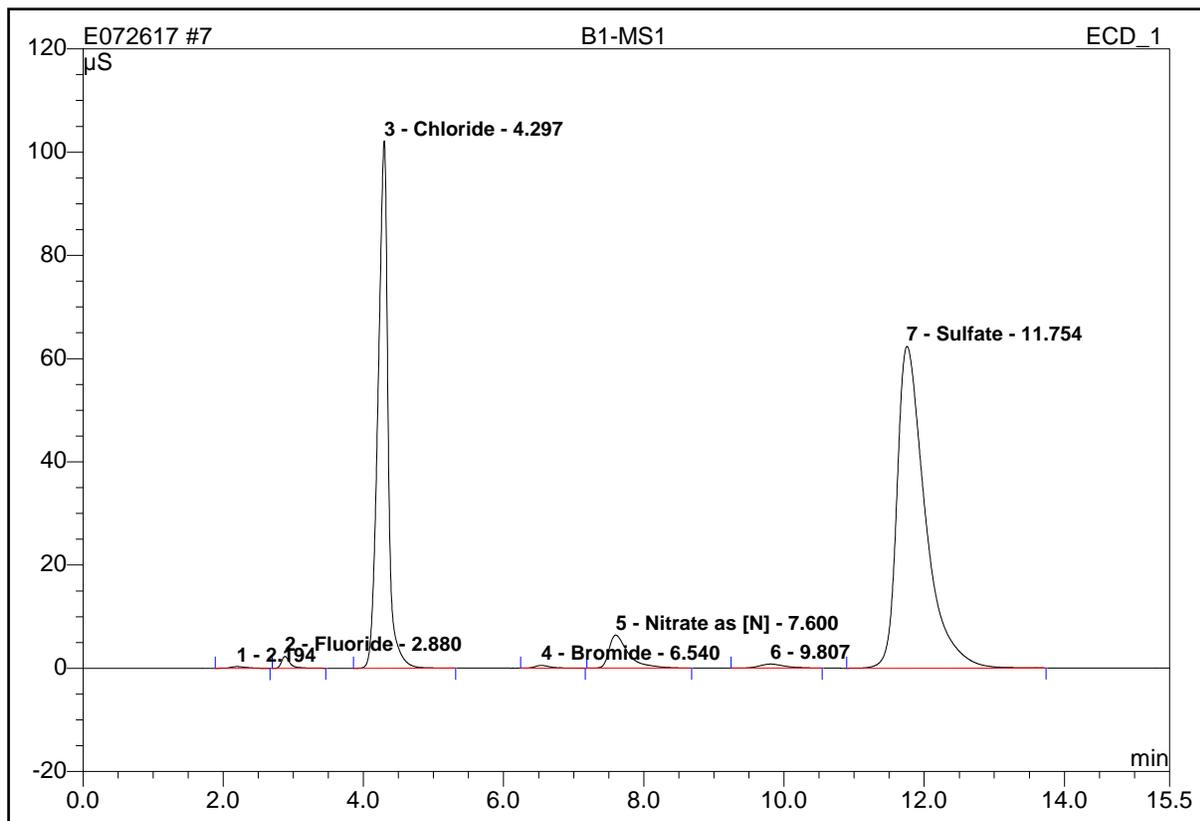
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Raw Data - Matrix Spike

7 B1-MS1			
Sample Name:	B1-MS1	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 20:59	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.19	n.a.	0.342	0.094	0.19	n.a.	BMB
2	2.88	Fluoride	2.324	0.332	0.68	1.297	BMB
3	4.30	Chloride	102.168	16.963	34.66	75.197	BMB
4	6.54	Bromide	0.535	0.140	0.29	2.011	BMB
5	7.60	Nitrate as [N]	6.404	2.048	4.18	4.982	BMB
6	9.81	n.a.	0.797	0.340	0.70	n.a.	BMB
7	11.75	Sulfate	62.336	29.027	59.31	183.573	BMB
Total:			174.905	48.945	100.00	267.061	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.



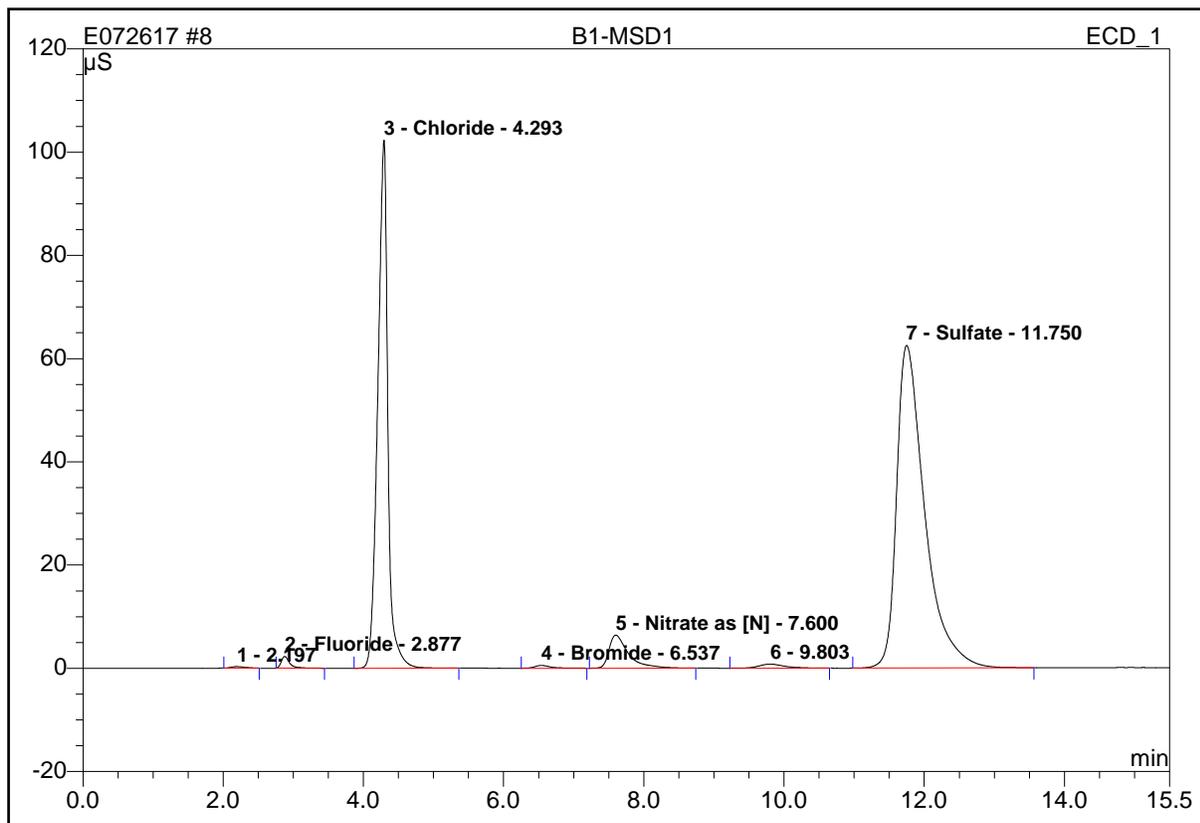
Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Matrix Spike Duplicate

8 B1-MSD1			
Sample Name:	B1-MSD1	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 21:17	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.20	n.a.	0.304	0.071	0.14	n.a.	BMB
2	2.88	Fluoride	2.284	0.315	0.64	1.229	BMB
3	4.29	Chloride	102.317	17.001	34.71	75.352	BMB
4	6.54	Bromide	0.538	0.140	0.29	2.019	BMB
5	7.60	Nitrate as [N]	6.405	2.052	4.19	4.991	BMB
6	9.80	n.a.	0.791	0.342	0.70	n.a.	BMB
7	11.75	Sulfate	62.516	29.068	59.34	183.802	BMB
Total:			175.156	48.988	100.00	267.394	

modified on: n.a.

By: OLH/EMW/JSW

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M = Main
R = Rider
BMB = This peak type is for resolved peaks.



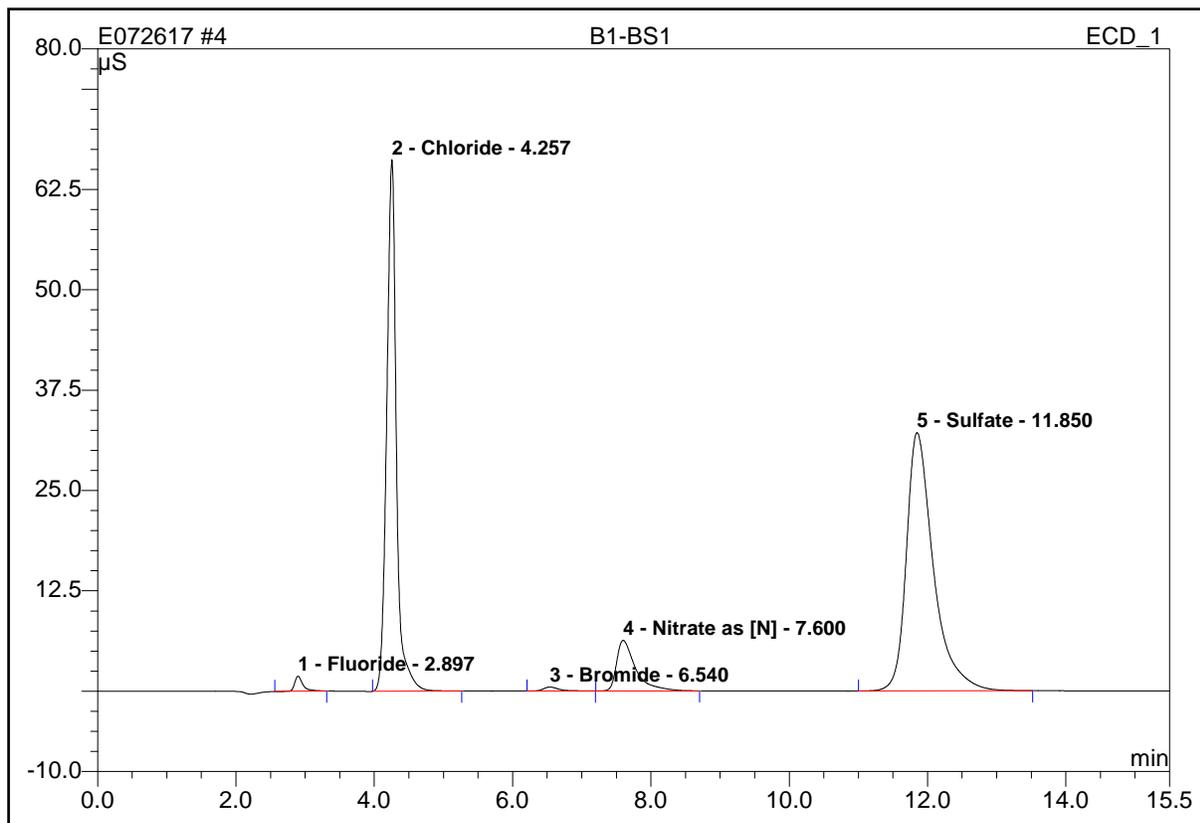
Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Lab Control Sample

4 B1-BS1			
Sample Name:	B1-BS1	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/26/2017 20:05	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	1.853	0.242	0.87	0.951	MB
2	4.26	Chloride	66.213	10.733	38.74	49.056	BMB
3	6.54	Bromide	0.510	0.136	0.49	1.956	BMB
4	7.60	Nitrate as [N]	6.310	2.017	7.28	4.912	BMB
5	11.85	Sulfate	32.162	14.579	52.62	97.765	BMB
Total:			107.048	27.707	100.00	154.640	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main
R = Rider
BMB = This peak type is for resolved peaks.



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Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2266

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Table with columns: Lab Number, Analysis, Prepared, By, Initial (ml), Final (ml), Spike ID, Source ID, ul Spike, ul Surrogate, % Solids. Contains multiple rows of test data for various analytes like Nitrate, Sulfate, and Chloride.



PREPARATION BENCH SHEET

B|G2266

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Spike Mixes	Description	Solvent	Prepared	Expires
7D25031	300.0 HSSS-SPIKE	DI WATER	4/25/2017 by Emily Wells	10/25/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713290

Instrument: IC5

Calibration ID:

Sequence Date: 07/26/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713290-ICV1	QC		1		7G12051		
1713290-ICB1	QC		2				
B[G2266-BLK1	QC		3				
B[G2266-BS1	QC		4				
1720405-01	i300.0w Chloride	G	5				
1720405-01	i300.0w Nitrate as N	G	5				
1720405-01	i300.0w Sulfate	G	5				
B[G2266-DUP1	QC		6				
B[G2266-MS1	QC		7				
B[G2266-MSD1	QC		8				
1720405-03	i300.0w Chloride	G	9				
1720405-03	i300.0w Nitrate as N	G	9				
1720405-03	i300.0w Sulfate	G	9				
1720405-04	i300.0w Chloride	G	10				
1720405-04	i300.0w Nitrate as N	G	10				
1720405-04	i300.0w Sulfate	G	10				
1720405-05	i300.0w Chloride	G	11				
1720405-05	i300.0w Nitrate as N	G	11				
1720405-05	i300.0w Sulfate	G	11				
1720405-06	i300.0w Chloride	G	12				
1720405-06	i300.0w Nitrate as N	G	12				
1720405-06	i300.0w Sulfate	G	12				
1713290-CCV1	QC		13		7G26021		
1713290-CCB1	QC		14				
1720405-13	i300.0w Chloride	G	15				
1720405-13	i300.0w Nitrate as N	G	15				
1720405-13	i300.0w Sulfate	G	15				
1720405-14	i300.0w Chloride	G	16				
1720405-14	i300.0w Nitrate as N	G	16				
1720405-14	i300.0w Sulfate	G	16				
1720405-15	i300.0w Chloride	G	17				
1720405-15	i300.0w Nitrate as N	G	17				
1720405-15	i300.0w Sulfate	G	17				
1720405-17	i300.0w Chloride	G	18				
1720405-17	i300.0w Nitrate as N	G	18				
1720405-17	i300.0w Sulfate	G	18				
1720393-01	i300.0w Chloride	A	19				
1720393-01	i300.0w Nitrate as N	A	19				
1720393-01	i300.0w Sulfate	A	19				



ANALYSIS SEQUENCE

1713290

Instrument: IC5

Calibration ID:

Sequence Date: 07/26/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
B[G2267-BLK1	QC		20				
B[G2267-BS1	QC		21				
1720400-01	i300.0w Chloride PQL=0.5	D	22				**
1720400-01	i300.0w Fluoride PQL=0.05	D	22				**
1720400-01	i300.0w Nitrate as N PQL=0.5	D	22				**
1720400-01	i300.0w Nitrate as NO3	D	22				BatchQC
1720400-01	i300.0w Sulfate PQL=1.0	D	22				**
B[G2267-DUP1	QC		23				
B[G2267-MS1	QC		24				
1713290-CCV2	QC		25		7G26021		
1713290-CCB2	QC		26				
B[G2267-MSD1	QC		27				
1720400-03	i300.0w Chloride PQL=0.5	D	28				**
1720400-03	i300.0w Fluoride PQL=0.05	D	28				**
1720400-03	i300.0w Nitrate as N PQL=0.5	D	28				**
1720400-03	i300.0w Sulfate PQL=1.0	D	28				**
1720400-05	i300.0w Chloride PQL=0.5	D	29				**
1720400-05	i300.0w Fluoride PQL=0.05	D	29				**
1720400-05	i300.0w Nitrate as N PQL=0.5	D	29				**
1720400-05	i300.0w Sulfate PQL=1.0	D	29				**
1720400-07	i300.0w Chloride PQL=0.5	D	30				**
1720400-07	i300.0w Fluoride PQL=0.05	D	30				**
1720400-07	i300.0w Nitrate as N PQL=0.5	D	30				**
1720400-07	i300.0w Sulfate PQL=1.0	D	30				**
1720400-09	i300.0w Chloride PQL=0.5	D	31				**
1720400-09	i300.0w Fluoride PQL=0.05	D	31				**
1720400-09	i300.0w Nitrate as N PQL=0.5	D	31				**
1720400-09	i300.0w Sulfate PQL=1.0	D	31				**
1720400-11	i300.0w Chloride PQL=0.5	D	32				**
1720400-11	i300.0w Fluoride PQL=0.05	D	32				**
1720400-11	i300.0w Nitrate as N PQL=0.5	D	32				**
1720400-11	i300.0w Sulfate PQL=1.0	D	32				**
1720400-13	i300.0w Chloride PQL=0.5	D	33				**
1720400-13	i300.0w Fluoride PQL=0.05	D	33				**
1720400-13	i300.0w Nitrate as N PQL=0.5	D	33				**
1720400-13	i300.0w Sulfate PQL=1.0	D	33				**
1720401-01	i300.0w Nitrate as NO3	D	34				
1720401-02	i300.0w Nitrate as NO3	D	35				
1720405-03RE1	i300.0w Chloride	G	36				Added 7/27/2017 by OLH



ANALYSIS SEQUENCE

1713290

Instrument: IC5

Calibration ID:

Sequence Date: 07/26/2017

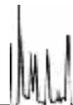
Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720405-03RE1	i300.0w Nitrate as N	G	36				Added 7/27/2017 by OLH
1720405-03RE1	i300.0w Sulfate	G	36				Added 7/27/2017 by OLH
1713290-CCV3	QC		37		7G26021		
1713290-CCB3	QC		38				



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AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20405
Class: WET
Method: EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE
EPA-310.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Client Sample Id:

Lab Sample Id:

27EW-02_170725
27EW-04_170725
27EW-08_170725
27EW-14_170725
27EW-18_170725
27EW-13_170725
27EW-16_170725
27EW-17_170725
27MW14_170725

1720405-01
1720405-03
1720405-04
1720405-05
1720405-06
1720405-13
1720405-14
1720405-15
1720405-17

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: Sara Guron

Date: 08-25-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS

EPA-310.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: MET-1

Analyte	DL	LOD	LOQ	Units
Total Alkalinity as CaCO3	4.1	4.1	4.1	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27EW-02_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-01

File ID: Tiamo072717-107

Sampled: 07/25/17 09:40

Prepared: 07/27/17 08:30

Analyzed: 07/27/17 17:10

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2111

Sequence:

1713352

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO3	220	4.1	4.1	4.1	1		EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27EW-04_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-03

File ID: Tiamo072817-053

Sampled: 07/25/17 11:10

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 13:26

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2116

Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO3	160	8.2	8.2	8.2	2	D	EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27EW-08_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-04

File ID: Tiamo072817-055

Sampled: 07/25/17 11:15

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 13:34

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2116

Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO3	230	4.1	4.1	4.1	1		EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27EW-14_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-05

File ID: Tiamo072817-064

Sampled: 07/25/17 11:40

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 14:10

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2117

Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO3	330	8.2	8.2	8.2	2	D	EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27EW-18_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-06

File ID: Tiamo072817-061

Sampled: 07/25/17 09:35

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 13:58

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2117

Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO3	100	4.1	4.1	4.1	1		EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27EW-13_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-13

File ID: Tiamo072817-074

Sampled: 07/25/17 12:50

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 14:52

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2117

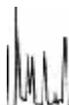
Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO3	260	8.2	8.2	8.2	2	D	EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27EW-16_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-14

File ID: Tiamo072817-076

Sampled: 07/25/17 11:50

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 15:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2117

Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO3	160	8.2	8.2	8.2	2	D	EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27EW-17_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-15

File ID: Tiamo072817-078

Sampled: 07/25/17 12:35

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 15:07

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2117

Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO3	88	8.2	8.2	8.2	2	D	EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27MW14_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-17

File ID: Tiamo072817-080

Sampled: 07/25/17 12:55

Prepared: 07/28/17 08:30

Analyzed: 07/28/17 15:14

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: BIG2117

Sequence:

1713473

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO3	91	4.1	4.1	4.1	1		EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-310.1

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- SAMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>BIG2111-BLK1</u>
Prepared:	<u>07/27/17 08:30</u>	Preparation:	<u>No Prep</u>
Analyzed:	<u>07/27/17 16:11</u>	Instrument:	<u>MET-1</u>
Batch:	<u>BIG2111</u>	Sequence:	<u>1713352</u>
		Calibration:	<u>UNASSIGNED</u>

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
---	Total Alkalinity as CaCO3	4.1	4.1	4.1	4.1	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-310.1

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>BIG2116-BLK1</u>
Prepared:	<u>07/28/17 08:30</u>	Preparation:	<u>No Prep</u>
Analyzed:	<u>07/28/17 10:36</u>	Instrument:	<u>MET-1</u>
Batch:	<u>BIG2116</u>	Sequence:	<u>1713473</u>
		Calibration:	<u>UNASSIGNED</u>

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
---	Total Alkalinity as CaCO3	4.1	4.1	4.1	4.1	U



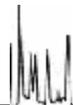
AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-310.1

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
 Matrix: Water Laboratory ID: BIG2117-BLK1 File ID: Tiamo072817-060
 Prepared: 07/28/17 08:30 Preparation: No Prep Initial/Final: 50 ml / 50 ml
 Analyzed: 07/28/17 13:52 Instrument: MET-1
 Batch: BIG2117 Sequence: 1713473 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
---	Total Alkalinity as CaCO3	4.1	4.1	4.1	4.1	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES

EPA-310.1

Duplicate

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2111-DUP1

Batch: B[G2111

Lab Source ID: 1720393-01

Preparation: No Prep

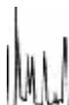
Initial/Final: 50 ml / 50 ml

Source Sample Name: Duplicate

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Total Alkalinity as CaCO3	10	211.16		205.07		2.93		EPA-310.1

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES

EPA-310.1

Duplicate

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2116-DUP1

Batch: B[G2116

Lab Source ID: 1720313-08

Preparation: No Prep

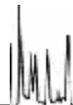
Initial/Final: 50 ml / 50 ml

Source Sample Name: Duplicate

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Total Alkalinity as CaCO3	10	261.82		246.00		6.23		EPA-310.1

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES
EPA-310.1

27EW-18 170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2117-DUP1

Batch: B[G2117

Lab Source ID: 1720405-06

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Source Sample Name: 27EW-18 170725

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Total Alkalinity as CaCO3	10	104.82		103.75		1.03		EPA-310.1

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
EPA-310.1

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2111 Laboratory ID: B[G2111-BS3
Preparation: No Prep Initial/Final: 50 ml / 50 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Total Alkalinity as CaCO3	100.00	91.740	91.7	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**LCS RECOVERY
EPA-310.1**

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water
Batch: B[G2116] Laboratory ID: B[G2116-BS3]
Preparation: No Prep Initial/Final: 50 ml / 50 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Total Alkalinity as CaCO3	100.00	91.740	91.7	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
EPA-310.1

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2117 Laboratory ID: B[G2117-BS3
Preparation: No Prep Initial/Final: 50 ml / 50 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Total Alkalinity as CaCO3	100.00	93.710	93.7	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-310.1

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713352</u>	Instrument:	<u>MET-1</u>
Matrix:	<u>Water</u>	Calibration:	<u>UNASSIGNED</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
LCS	B[G2111-BS3	Tiamo072717-095	07/27/17 16:05
Blank	B[G2111-BLK1	Tiamo072717-096	07/27/17 16:11
Duplicate	B[G2111-DUP1	Tiamo072717-098	07/27/17 16:21
27EW-02_170725	1720405-01	Tiamo072717-107	07/27/17 17:10



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-310.1

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713473</u>	Instrument:	<u>MET-1</u>
Matrix:	<u>Water</u>	Calibration:	<u>UNASSIGNED</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
LCS	B[G2116-BS3	Tiamo072817-024	07/28/17 10:30
Blank	B[G2116-BLK1	Tiamo072817-025	07/28/17 10:36
Duplicate	B[G2116-DUP1	Tiamo072817-037	07/28/17 12:23
27EW-04_170725	1720405-03	Tiamo072817-053	07/28/17 13:26
27EW-08_170725	1720405-04	Tiamo072817-055	07/28/17 13:34
LCS	B[G2117-BS3	Tiamo072817-059	07/28/17 13:46
Blank	B[G2117-BLK1	Tiamo072817-060	07/28/17 13:52
27EW-18_170725	1720405-06	Tiamo072817-061	07/28/17 13:58
27EW-18_170725	B[G2117-DUP1	Tiamo072817-062	07/28/17 14:03
27EW-14_170725	1720405-05	Tiamo072817-064	07/28/17 14:10
27EW-13_170725	1720405-13	Tiamo072817-074	07/28/17 14:52
27EW-16_170725	1720405-14	Tiamo072817-076	07/28/17 15:00
27EW-17_170725	1720405-15	Tiamo072817-078	07/28/17 15:07
27MW14_170725	1720405-17	Tiamo072817-080	07/28/17 15:14



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

HOLDING TIME SUMMARY
EPA-310.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
27EW-02_170725	07/25/17 09:40	07/25/17 22:20	07/27/17 08:30	2.00	14.00	07/27/17 17:10	2.00	14.00	
27EW-04_170725	07/25/17 11:10	07/25/17 22:20	07/28/17 08:30	3.00	14.00	07/28/17 13:26	3.00	14.00	
27EW-08_170725	07/25/17 11:15	07/25/17 22:20	07/28/17 08:30	3.00	14.00	07/28/17 13:34	3.00	14.00	
27EW-14_170725	07/25/17 11:40	07/25/17 22:20	07/28/17 08:30	3.00	14.00	07/28/17 14:10	3.00	14.00	
27EW-18_170725	07/25/17 09:35	07/25/17 22:20	07/28/17 08:30	3.00	14.00	07/28/17 13:58	3.00	14.00	
27EW-13_170725	07/25/17 12:50	07/25/17 22:20	07/28/17 08:30	3.00	14.00	07/28/17 14:52	3.00	14.00	
27EW-16_170725	07/25/17 11:50	07/25/17 22:20	07/28/17 08:30	3.00	14.00	07/28/17 15:00	3.00	14.00	
27EW-17_170725	07/25/17 12:35	07/25/17 22:20	07/28/17 08:30	3.00	14.00	07/28/17 15:07	3.00	14.00	
27MW14_170725	07/25/17 12:55	07/25/17 22:20	07/28/17 08:30	3.00	14.00	07/28/17 15:14	3.00	14.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument MET-1



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Analytical Runs



Sample ID	Sample Vol., ml	Cond., µmhos/cm (24.5 °C)	pH (24.5 °C)	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
EC Calibration									
Determination start	1411	2017-07-27 08:42:59							
Method. BCL-CAL Cond.									
ICV1 @COND									
Determination start	998.30	2017-07-27 08:46:54							
Method. BCL-Cond									
B1-BS1 @COND									
Determination start	308.00	2017-07-27 08:48:32							
Method. BCL-Cond									
pH Calibration									
Determination start	7.02	2017-07-27 09:06:02	(25.5 °C)						
Method. BCL-pH									
B1-BS2 @pH									
Determination start	50	2017-07-27 09:09:12	(24.8 °C)	0.484	1.168	0.00	73.63	15.21	88.85
Method. BCL-Cond-pH-Alk									
B1-BS3 @Alk									
Determination start	50	2017-07-27 09:14:36	(24.5 °C)	0.000	0.010	0.00	0.00	0.76	0.76
Method. BCL-Cond-pH-Alk-BLK1									
B1-BLK1 @Alk									
Determination start	50	2017-07-27 09:19:34	(23.8 °C)	0.000	0.726	0.00	0.00	55.22	55.22
Method. BCL-Cond-pH-Alk									
1720267-08@G									
Determination start	50	2017-07-27 09:24:17	(23.9 °C)	0.000	0.710	0.00	0.00	54.01	54.01
Method. BCL-Cond-pH-Alk									
1720267-08@G									
Determination start	50	2017-07-27 09:29:51	(25.2 °C)	0.000	0.710	0.00	0.00	54.01	54.01
Method. BCL-Cond-pH-Alk									



Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start (23.9 °C) (25.2 °C)									
B1-DUP1	50	138.30	7.56	0.000	0.644	0.00	0.00	48.99	48.99
Determination start 2017-07-27 09:35:24 (25.0 °C) 9.70									
BLK1									
Determination start 2017-07-27 09:37:05 (23.9 °C) (25.4 °C)									
1720267-02@D	25	16803.10	7.29	0.000	10.246	0.00	0.00	1558.75	1558.75
Determination start 2017-07-27 09:44:47 (25.0 °C) 203.70									
BLK1									
Determination start 2017-07-27 09:46:48 (23.9 °C) (25.5 °C)									
1720267-03@E	25	24844.20	7.06	0.000	11.638	0.00	0.00	1770.52	1770.52
Determination start 2017-07-27 09:54:53 (24.9 °C) 183.00									
BLK1									
Determination start 2017-07-27 09:56:54 (23.8 °C) (25.5 °C)									
1720267-04@E	25	3061.20	7.57	0.000	3.576	0.00	0.00	544.03	544.03
Determination start 2017-07-27 10:03:29 (24.8 °C) 30.70									
BLK1									
Determination start 2017-07-27 10:05:26 (23.7 °C) (25.2 °C)									
1720267-09@E	50	546.30	7.50	0.000	2.036	0.00	0.00	154.87	154.87



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-27 10:10:56 (24.7 °C) 24.10 Method. BCL-Cond								
1720267-10@E	50	622.40	7.79 (23.7 °C) (25.2 °C)	0.000	2.376	0.00	0.00	180.73	180.73
Determination start 2017-07-27 10:12:39 (23.7 °C) (25.2 °C) Titer 0.076 Method. BCL-Cond-pH-Alk									
BLK1	Determination start 2017-07-27 10:18:14 (24.7 °C) 23.70 Method. BCL-Cond								
1720267-11@E	25	11657.70	7.60 (23.6 °C) (25.4 °C)	0.000	1.944	0.00	0.00	295.75	295.75
Determination start 2017-07-27 10:25:55 (24.7 °C) 58.00 Method. BCL-Cond									
BLK1	Determination start 2017-07-27 10:27:56 (23.5 °C) (25.4 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
1720269-01@D	25	1974.70	9.19 (23.5 °C) (25.4 °C)	0.218	0.998	0.00	66.33	85.50	151.83
Determination start 2017-07-27 10:34:01 (24.7 °C) 29.80 Method. BCL-Cond									
BLK1	Determination start 2017-07-27 10:35:44 (23.5 °C) (25.2 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
1720277-01@G	50	295.00	8.92 (23.5 °C) (25.2 °C)	0.118	0.992	0.00	17.95	57.51	75.46
Determination start 2017-07-27 10:41:41 (23.6 °C) (25.4 °C) Titer 0.076 Method. BCL-Cond-pH-Alk									
1720312-01@A	25	1317.20	3.16 (23.6 °C) (25.4 °C)	0.000	0.000	0.00	0.00	0.00	0.00
Determination start 2017-07-27 10:41:41 (23.6 °C) (25.4 °C) Titer 0.076 Method. BCL-Cond-pH-Alk									



Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-27 10:46:06 (24.6 °C) 27.10 Method. BCL-Cond								
B2-BS1@COND	Determination start 2017-07-27 10:47:44 (23.6 °C) 309.80 Method. BCL-Cond								
B2-BS2@PH	Determination start 2017-07-27 10:49:33 (25.5 °C) 7.01 Method. BCL-pH								
B2-BS3@ALK	50	212.00	10.08	0.448	1.202	0.00	68.16	23.28	91.43
Determination start 2017-07-27 10:52:46 (23.7 °C) (25.3 °C) Titer 0.076 Method. BCL-Cond-pH-ALK									
B2-BLK1	50	3.20	4.47	0.000	0.000	0.00	0.00	0.00	0.00
Determination start 2017-07-27 10:58:17 (23.9 °C) (25.3 °C) Titer 0.076 Method. BCL-Cond-pH-ALK-BLK1									
1720318-01@D	25	2706.10	7.88	0.000	1.492	0.00	0.00	226.98	226.98
Determination start 2017-07-27 11:03:09 (23.7 °C) (25.5 °C) Titer 0.076 Method. BCL-Cond-pH-ALK									
B2-DUP1	25	2710.00	7.86	0.000	1.462	0.00	0.00	222.42	222.42
Determination start 2017-07-27 11:09:02 (23.7 °C) (25.6 °C) Titer 0.076 Method. BCL-Cond-pH-ALK									
1720312-02@A	50	974.50	6.81	0.000	0.722	0.00	0.00	54.92	54.92
Determination start 2017-07-27 11:14:39 (23.9 °C) (25.4 °C) Titer 0.076 Method. BCL-Cond-pH-ALK									
BLK1	Determination start 2017-07-27 11:20:35 (24.8 °C) 28.00 Method. BCL-Cond								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 11:22:18									
		(24.0 °C)	(25.7 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720315-01@E	25	1650.10	7.15	0.000	6.346	0.00	0.00	965.43	965.43
Determination start 2017-07-27 11:28:59									
		(23.9 °C)	(25.7 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720318-02@D	25	1193.90	8.06	0.000	1.294	0.00	0.00	196.86	196.86
Determination start 2017-07-27 11:34:24									
		(24.1 °C)	(25.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720318-03@D	25	2821.80	7.92	0.000	1.474	0.00	0.00	224.24	224.24
Determination start 2017-07-27 11:40:18									
		(24.2 °C)	(25.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720318-04@D	25	2531.30	7.93	0.000	1.448	0.00	0.00	220.29	220.29
Determination start 2017-07-27 11:45:54									
		(23.9 °C)	(25.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720337-01@A	50	384.90	8.09	0.000	1.390	0.00	0.00	105.73	105.73
Determination start 2017-07-27 11:51:48									
		(25.6 °C)	(26.4 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B1-BS3@ALK	50	204.80	10.19	0.418	1.004	0.00	63.59	12.78	76.37
Determination start 2017-07-27 11:57:22									
		(24.3 °C)	(25.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720312-02@ARE1	50	942.90	6.59	0.000	0.680	0.00	0.00	51.73	51.73
Determination start 2017-07-27 12:03:33									
		(25.0 °C)					Method.	BCL-Cond	
BLK1		31.50							
Determination start 2017-07-27 12:05:34									
		(23.7 °C)	(25.4 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720337-02@G	50	388.00	8.08	0.000	1.752	0.00	0.00	133.27	133.27



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 12:11:35									
		(23.8 °C)	(25.7 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720342-02@A	25	1141.70	7.39	0.000	0.468	0.00	0.00	71.20	71.20
Determination start 2017-07-27 12:16:52									
		(27.6 °C)	9.30				Method.	BCL-Cond	
BLK1									
Determination start 2017-07-27 12:18:34									
		(25.2 °C)	(26.1 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B1-BS3@ALK	50	211.20	10.21	0.420	0.966	0.00	63.90	9.58	73.48
Determination start 2017-07-27 12:30:36									
		(24.3 °C)	(25.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720343-01@D	50	337.90	7.82	0.000	0.792	0.00	0.00	60.24	60.24
Determination start 2017-07-27 12:37:24									
		(24.9 °C)	(26.1 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B1-BS3@ALK	50	209.30	10.22	0.506	1.170	0.00	76.98	12.02	89.00
Determination start 2017-07-27 12:42:46									
		(24.3 °C)	311.10				Method.	BCL-Cond	
B3-BS1@COND									
Determination start 2017-07-27 12:44:20									
		(26.0 °C)	7.01				Method.	BCL-pH	
B3-BS2@PH									
Determination start 2017-07-27 12:47:44									
		(24.3 °C)	(25.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B3-BS3@ALK	50	199.20	9.91	0.376	1.230	0.00	57.20	36.36	93.56
Determination start 2017-07-27 12:53:11									
		(24.5 °C)	(25.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk-BLK1	
B3-BLK1	50	2.00	4.67	0.000	0.012	0.00	0.00	0.91	0.91



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 12:58:17									
1720350-01@A	25	(24.5 °C) 1314.80	(26.2 °C) 7.96	0.000	1.406	0.00	0.00	213.90	213.90
Determination start 2017-07-27 13:03:34									
B3-DUP1	25	(24.5 °C) 1316.60	(26.3 °C) 7.98	0.000	1.384	0.00	0.00	210.55	210.55
Determination start 2017-07-27 13:08:41									
1720344-01@A	25	(24.5 °C) 1033.20	(26.3 °C) 7.50	0.000	1.986	0.00	0.00	302.14	302.14
Determination start 2017-07-27 13:14:21									
BLK1		(25.7 °C) 10.70							
Determination start 2017-07-27 13:16:03									
1720344-02@A	50	(24.6 °C) 747.70	(26.2 °C) 7.86	0.000	1.556	0.00	0.00	118.36	118.36
Determination start 2017-07-27 13:21:47									
BLK1		(25.7 °C) 10.40							
Determination start 2017-07-27 13:23:30									
1720345-01@A	25	(24.4 °C) 1395.20	(26.3 °C) 7.90	0.000	2.878	0.00	0.00	437.84	437.84
Determination start 2017-07-27 13:29:23									
1720350-02@A	25	(24.1 °C) 1381.10	(26.5 °C) 8.04	0.000	1.638	0.00	0.00	249.19	249.19
Determination start 2017-07-27 13:34:53									
1720350-03@A	50	(24.5 °C) 747.90	(26.6 °C) 8.24	0.000	3.572	0.00	0.00	271.71	271.71



Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 13:40:40									
		(24.4 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720350-04@A	50	858.20	8.16	0.000	1.856	0.00	0.00	141.18	141.18
Determination start 2017-07-27 13:46:10									
		(24.3 °C)	(26.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720350-05@A	25	1146.10	7.94	0.000	0.810	0.00	0.00	123.23	123.23
Determination start 2017-07-27 13:51:28									
		(24.7 °C)	(26.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720350-06@A	50	747.80	8.14	0.000	2.228	0.00	0.00	169.48	169.48
Determination start 2017-07-27 13:57:03									
		(25.0 °C)	(26.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720350-07@A	50	426.20	8.16	0.000	1.324	0.00	0.00	100.71	100.71
Determination start 2017-07-27 14:03:01									
		(25.4 °C)					Method.	BCL-Cond	
B4-BS1 @COND		315.30							
Determination start 2017-07-27 14:04:43									
		(27.3 °C)					Method.	BCL-pH	
B4-BS2 @PH		7.01							
Determination start 2017-07-27 14:08:06									
		(26.0 °C)	(27.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B4-BS3 @ALK	50	216.60	10.17	0.480	1.204	0.00	73.02	18.56	91.58
Determination start 2017-07-27 14:13:34									
		(25.9 °C)	(27.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk-BLK1	
B4-BLK1	50	1.40	4.66	0.000	0.012	0.00	0.00	0.91	0.91
Determination start 2017-07-27 14:18:36									
		(25.1 °C)	(27.1 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720350-08@A	50	970.10	7.88	0.000	1.982	0.00	0.00	150.76	150.76



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 14:24:02									
		(25.1 °C)	(27.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B4-DUP1	50	970.60	7.88	0.000	1.962	0.00	0.00	149.24	149.24
Determination start 2017-07-27 14:29:30									
		(25.1 °C)	(27.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720350-09@A	50	471.10	7.99	0.000	1.950	0.00	0.00	148.33	148.33
Determination start 2017-07-27 14:34:56									
		(25.3 °C)					Method.	BCL-Cond	
BLK1		10.80							
Determination start 2017-07-27 14:36:37									
		(24.5 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720337-01@ARE1	50	376.10	8.07	0.000	1.720	0.00	0.00	130.83	130.83
Determination start 2017-07-27 14:42:03									
		(24.7 °C)	(27.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720351-01@D	25	5898.20	7.76	0.000	4.024	0.00	0.00	612.18	612.18
Determination start 2017-07-27 14:48:22									
		(25.3 °C)					Method.	BCL-Cond	
BLK1		21.50							
Determination start 2017-07-27 14:50:04									
		(24.7 °C)	(27.1 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720351-02@D	25	1289.20	7.36	0.000	1.868	0.00	0.00	284.18	284.18
Determination start 2017-07-27 14:56:01									
		(27.7 °C)					Method.	BCL-Cond	
BLK1		4.90							
Determination start 2017-07-27 14:57:52									
		(25.2 °C)	(27.3 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720351-03@D	25	1290.10	7.44	0.000	1.870	0.00	0.00	284.49	284.49



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-27 15:03:57 (27.2 °C) 5.00 Method. BCL-Cond								
1720352-01@J	25	44951.60	7.29 (27.3 °C)	0.000	18.094	0.00	0.00	2752.69	2752.69
	Determination start 2017-07-27 15:05:39 (25.3 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 15:16:34 (26.6 °C) 16.70 Method. BCL-Cond								
1720353-01@I	25	61979.40	7.62 (27.2 °C)	0.000	18.634	0.00	0.00	2834.84	2834.84
	Determination start 2017-07-27 15:18:35 (25.1 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 15:29:31 (30.0 °C) 18.40 Method. BCL-Cond								
1720355-01@I	25	44568.90	7.42 (27.1 °C)	0.000	19.180	0.00	0.00	2917.90	2917.90
	Determination start 2017-07-27 15:31:31 (25.3 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 15:42:21 (28.6 °C) 21.80 Method. BCL-Cond								
1720356-01@A	25	23925.40	7.81 (25.1 °C)	0.000	6.506	0.00	0.00	989.77	989.77
	Determination start 2017-07-27 15:44:22 (27.0 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 15:51:25 (27.7 °C) 31.10 Method. BCL-Cond								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 15:53:26									
		(25.0 °C)	(27.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720360-01@A	25	1131.40	5.03	0.000	0.428	0.00	0.00	65.11	65.11
Determination start 2017-07-27 15:59:10									
		(27.1 °C)	10.20				Method.	BCL-Cond	
BLK1									
Determination start 2017-07-27 16:00:49									
		(24.9 °C)	316.80				Method.	BCL-Cond	
B5-BS1@COND									
Determination start 2017-07-27 16:02:36									
		(26.9 °C)	7.01				Method.	BCL-pH	
B5-BS2@PH									
Determination start 2017-07-27 16:05:58									
		(24.7 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B5-BS3@ALK	50	210.10	10.03	0.410	1.206	0.00	62.37	29.36	91.74
Determination start 2017-07-27 16:11:34									
		(24.4 °C)	(26.4 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk-BLK1	
B5-BLK1	50	2.00	4.55	0.000	0.000	0.00	0.00	0.00	0.00
Determination start 2017-07-27 16:16:25									
		(24.3 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720393-01@A	25	1868.20	8.16	0.000	1.388	0.00	0.00	211.16	211.16
Determination start 2017-07-27 16:21:49									
		(24.0 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B5-DUP1	25	1871.10	8.15	0.000	1.348	0.00	0.00	205.07	205.07
Determination start 2017-07-27 16:27:37									
		(24.0 °C)	(26.1 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720400-01@E	50	994.50	7.98	0.000	4.672	0.00	0.00	355.38	355.38



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 16:33:42									
		(24.3 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720400-03@E	25	1036.00	8.05	0.000	2.514	0.00	0.00	382.46	382.46
Determination start 2017-07-27 16:39:14									
		(24.7 °C)	(26.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720400-05@D	25	1049.90	8.03	0.000	1.978	0.00	0.00	300.92	300.92
Determination start 2017-07-27 16:44:54									
		(24.7 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720400-07@D	50	945.90	8.12	0.000	4.668	0.00	0.00	355.08	355.08
Determination start 2017-07-27 16:50:59									
		(24.8 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720400-09@D	50	879.40	8.15	0.000	4.514	0.00	0.00	343.36	343.36
Determination start 2017-07-27 16:57:01									
		(24.6 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720400-11@D	50	919.20	7.99	0.000	4.302	0.00	0.00	327.24	327.24
Determination start 2017-07-27 17:03:02									
		(24.0 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720400-13@D	25	1019.50	8.09	0.000	2.274	0.00	0.00	345.95	345.95
Determination start 2017-07-27 17:08:25									
		(30.9 °C)	6.50				Method.	BCL-Cond	
BLK1									
Determination start 2017-07-27 17:10:24									
		(24.3 °C)	(26.1 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-01@G	50	698.50	7.98	0.000	2.908	0.00	0.00	221.20	221.20
Determination start 2017-07-27 17:32:05									
							Method.	BCL-Cond	
BLK1									



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-27 17:32:17 (28.1 °C) 5.80 Method. BCL-Cond								
1720543-01@A	50	802.20	7.57 (25.8 °C)	0.000	2.746	0.00	0.00	208.88	208.88
	Determination start 2017-07-27 17:35:25 (24.0 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 17:41:18 (27.4 °C) 6.30 Method. BCL-Cond								
B6-BS1 @COND	Determination start 2017-07-27 17:42:57 (24.0 °C) 316.00 Method. BCL-Cond								
B6-BS2 @PH	Determination start 2017-07-27 17:44:35 (26.3 °C) 7.00 Method. BCL-pH								
B6-BS3 @ALK	50	197.70	9.94 (26.1 °C)	0.382	1.222	0.00	58.11	34.84	92.95
	Determination start 2017-07-27 17:47:53 (23.7 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
B6-BLK1	50	1.70	4.78 (25.9 °C)	0.000	0.020	0.00	0.00	1.52	1.52
	Determination start 2017-07-27 17:53:24 (23.4 °C) Titer 0.076 Method. BCL-Cond-pH-Alk-BLK1								
1720598-01@A	50	233.00	8.23 (25.4 °C)	0.000	0.782	0.00	0.00	59.48	59.48
	Determination start 2017-07-27 17:58:40 (22.6 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
B6-DUP1	50	233.80	8.22 (25.2 °C)	0.000	0.766	0.00	0.00	58.27	58.27
	Determination start 2017-07-27 18:03:58 (22.4 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-27 18:09:32 (26.3 °C) 5.60 Method. BCL-Cond								
1720598-02@A	50	243.50	7.54 (25.6 °C)	0.000	0.822	0.00	0.00	62.53	62.53
	Determination start 2017-07-27 18:11:14 (23.0 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 18:16:17 (26.1 °C) 5.60 Method. BCL-Cond								
1720598-03@A	50	238.90	7.76 (25.8 °C)	0.000	0.812	0.00	0.00	61.77	61.77
	Determination start 2017-07-27 18:17:59 (23.4 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 18:23:10 (25.9 °C) 5.60 Method. BCL-Cond								
1720604-01@A	50	179.70	9.00 (25.9 °C)	0.098	0.646	0.00	14.91	34.23	49.14
	Determination start 2017-07-27 18:24:52 (23.8 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 18:30:48 (25.8 °C) 5.70 Method. BCL-Cond								
1720604-02@A	50	184.60	7.65 (26.0 °C)	0.000	0.702	0.00	0.00	53.40	53.40
	Determination start 2017-07-27 18:32:30 (23.9 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 18:38:11 (25.6 °C) 5.60 Method. BCL-Cond								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 18:39:52									
		(23.6 °C)	(25.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720604-03@A	50	183.60	7.76	0.000	0.696	0.00	0.00	52.94	52.94
Determination start 2017-07-27 18:45:38									
		(25.5 °C)					Method.	BCL-Cond	
BLK1		5.60							
Determination start 2017-07-27 18:47:19									
		(23.1 °C)	(26.1 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720108-08@A	25	1794.20	8.10	0.000	3.446	0.00	0.00	524.25	524.25
Determination start 2017-07-27 18:53:28									
		(25.4 °C)					Method.	BCL-Cond	
BLK1		9.40							
Determination start 2017-07-27 18:55:09									
		(23.0 °C)	(25.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk-BLK1	
1720140-01@A	50	8.10	6.52	0.000	0.076	0.00	0.00	5.78	5.78
Determination start 2017-07-27 19:00:49									
		(25.3 °C)					Method.	BCL-Cond	
BLK1		5.60							
Determination start 2017-07-27 19:02:30									
		(22.9 °C)	(25.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720313-05@X	25	1067.30	6.54	0.000	2.774	0.00	0.00	422.02	422.02
Determination start 2017-07-27 19:10:06									
		(25.2 °C)					Method.	BCL-Cond	
BLK1		7.50							
Determination start 2017-07-27 19:11:47									
		(23.3 °C)	(25.7 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720313-06@H	50	666.50	7.29	0.000	3.812	0.00	0.00	289.96	289.96



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-27 19:17:55 (25.2 °C) 7.10 Method. BCL-Cond								
B7-BS1@COND	Determination start 2017-07-27 19:19:34 (23.7 °C) 317.80 Method. BCL-Cond								
B7-BS2@PH	Determination start 2017-07-27 19:21:17 (26.3 °C) 7.00 Method. BCL-pH								
B7-BS3@ALK	50	207.80	9.98	0.378	1.208	0.00	57.51	34.38	91.89
Determination start 2017-07-27 19:24:33 (23.9 °C) (26.1 °C) Titer 0.076 Method. BCL-Cond-pH-ALK									
B7-BLK1	50	1.70	4.96	0.000	0.024	0.00	0.00	1.83	1.83
Determination start 2017-07-27 19:30:06 (23.7 °C) (26.0 °C) Titer 0.076 Method. BCL-Cond-pH-ALK-BLK1									
1720155-01@A	50	162.20	6.65	0.000	0.202	0.00	0.00	15.37	15.37
Determination start 2017-07-27 19:35:33 (23.9 °C) (26.0 °C) Titer 0.076 Method. BCL-Cond-pH-ALK									
B7-DUP1	50	162.00	6.71	0.000	0.194	0.00	0.00	14.76	14.76
Determination start 2017-07-27 19:40:33 (24.3 °C) (26.3 °C) Titer 0.076 Method. BCL-Cond-pH-ALK									
BLK1	Determination start 2017-07-27 19:46:09 (25.1 °C) 6.10 Method. BCL-Cond								
1720147-15@B	25	1049.10	7.42	0.000	3.802	0.00	0.00	578.41	578.41
Determination start 2017-07-27 19:47:51 (24.3 °C) (26.5 °C) Titer 0.076 Method. BCL-Cond-pH-ALK									



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-27 19:53:42 (25.1 °C) 8.40 Method. BCL-Cond								
1720147-16@B	50	859.00	7.50 (26.2 °C)	0.000	5.812	0.00	0.00	442.10	442.10
	Determination start 2017-07-27 19:55:23 (24.3 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 20:02:16 (25.0 °C) 8.10 Method. BCL-Cond								
1720147-17@B	50	369.60	8.13 (26.1 °C)	0.000	2.208	0.00	0.00	167.95	167.95
	Determination start 2017-07-27 20:03:57 (24.2 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 20:09:25 (25.0 °C) 6.90 Method. BCL-Cond								
1720147-18@B	50	828.10	8.24 (26.2 °C)	0.000	5.760	0.00	0.00	438.14	438.14
	Determination start 2017-07-27 20:11:06 (24.4 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 20:17:18 (25.0 °C) 8.00 Method. BCL-Cond								
1720147-19@B	50	837.60	8.08 (26.2 °C)	0.000	5.764	0.00	0.00	438.45	438.45
	Determination start 2017-07-27 20:19:00 (24.4 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-27 20:25:17 (24.9 °C) 8.00 Method. BCL-Cond								



..... Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 20:26:58									
		(24.2 °C)	(26.4 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720154-01@D	25	18295.90	7.77	0.000	1.852	0.00	0.00	281.75	281.75
Determination start 2017-07-27 20:33:13									
		(25.0 °C)					Method.	BCL-Cond	
BLK1		27.50							
Determination start 2017-07-27 20:35:13									
		(24.3 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720154-02@D	25	6985.80	7.67	0.000	2.360	0.00	0.00	359.03	359.03
Determination start 2017-07-27 20:41:33									
		(25.0 °C)					Method.	BCL-Cond	
BLK1		18.00							
Determination start 2017-07-27 20:43:34									
		(24.4 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720154-03@D	25	15076.10	8.04	0.000	2.748	0.00	0.00	418.06	418.06
Determination start 2017-07-27 20:49:59									
		(25.0 °C)					Method.	BCL-Cond	
BLK1		21.60							
Determination start 2017-07-27 20:51:59									
		(24.4 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720154-04@D	25	21713.60	7.77	0.000	1.800	0.00	0.00	273.84	273.84
Determination start 2017-07-27 20:58:11									
		(25.0 °C)					Method.	BCL-Cond	
BLK1		28.00							
Determination start 2017-07-27 21:00:08									
		(24.3 °C)					Method.	BCL-Cond	
B8-BS1@COND		321.50							



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 21:01:49 (26.5 °C) 7.00									
B8-BS2@PH									
Determination start 2017-07-27 21:05:06 (24.3 °C) (26.2 °C)									
B8-BS3@ALK	50	215.10	9.94	0.370	1.234	0.00	56.29	37.58	93.87
Determination start 2017-07-27 21:10:41 (24.2 °C) (26.1 °C)									
B8-BLK1	50	2.60	4.78	0.000	0.016	0.00	0.00	1.22	1.22
Determination start 2017-07-27 21:15:57 (24.1 °C) (26.3 °C)									
1720210-01@D	25	6661.90	7.64	0.000	0.766	0.00	0.00	116.53	116.53
Determination start 2017-07-27 21:21:52 (24.0 °C) (26.4 °C)									
B8-DUP1	25	6670.10	7.65	0.000	0.750	0.00	0.00	114.10	114.10
Determination start 2017-07-27 21:27:39 (24.2 °C) (26.4 °C)									
1720188-01@A	25	1070.50	7.59	0.000	0.806	0.00	0.00	122.62	122.62
Determination start 2017-07-27 21:33:08 (25.1 °C) 15.50									
BLK1									
Determination start 2017-07-27 21:35:08 (24.0 °C) (26.3 °C)									
1720210-02@D	25	4368.60	7.79	0.000	0.872	0.00	0.00	132.66	132.66
Determination start 2017-07-27 21:40:58 (25.0 °C) 18.90									
BLK1									



Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
1720210-03@D	25	4435.80 (24.1 °C) (26.3 °C)	7.82	0.000	0.894	0.00	0.00	136.01	136.01
BLK1	Determination start 2017-07-27 21:42:59 (25.0 °C) 21.10 Method. BCL-Cond-pH-Alk								
1720258-01@A	25	1587.50 (24.3 °C) (26.4 °C)	10.69	1.298	2.604	0.00	394.94	1.22	396.15
BLK1	Determination start 2017-07-27 21:51:00 (24.9 °C) 19.10 Method. BCL-Cond								
1720258-02@A	25	1586.40 (24.3 °C) (26.4 °C)	9.68	0.666	2.494	0.00	202.64	176.78	379.42
BLK1	Determination start 2017-07-27 21:59:09 (24.8 °C) 17.60 Method. BCL-Cond-pH-Alk								
1720258-03@A	25	2334.50 (24.1 °C) (26.3 °C)	6.82	0.000	1.930	0.00	0.00	293.62	293.62
BLK1	Determination start 2017-07-27 22:07:35 (24.9 °C) 17.70 Method. BCL-Cond								
1720259-01@A	25	1104.40 (24.4 °C) (26.5 °C)	5.82	0.000	1.348	0.00	0.00	205.07	205.07
	Determination start 2017-07-27 22:16:02 (24.4 °C) 5.82 Method. BCL-Cond-pH-Alk								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-27 22:22:07 (25.0 °C) 16.70								
1720267-01@D	25	26460.60	7.59	0.000	13.162	0.00	0.00	2002.37	2002.37
BLK1	Determination start 2017-07-27 22:32:30 (25.2 °C) 32.60								
1720313-07@A	50	946.80	6.87	0.000	5.652	0.00	0.00	429.93	429.93
BLK1	Determination start 2017-07-27 22:41:41 (25.1 °C) 17.70								
10000	Determination start 2017-07-27 22:43:38 (24.6 °C) 10169.30								
ALK	50	197.20	9.89	0.344	1.200	0.00	52.33	38.95	91.28
ALK	50	197.50	9.94	0.358	1.202	0.00	54.46	36.97	91.43
303	Determination start 2017-07-27 22:56:36 (24.3 °C) 322.10								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk	
303	Determination start 2017-07-27 22:58:15									
		(24.4 °C)								Method. BCL-Cond
303	Determination start 2017-07-27 23:00:01									
		(24.5 °C)								Method. BCL-Cond
7.00	Determination start 2017-07-27 23:01:42									
		(26.4 °C)								Method. BCL-pH
		7.01								
7.00	Determination start 2017-07-27 23:05:00									
		(26.5 °C)								Method. BCL-pH
		7.01								
7.00	Determination start 2017-07-27 23:08:14									
		(26.6 °C)								Method. BCL-pH
		7.01								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
EC Calibration									
Determination start	2017-07-28 08:30:33	(24.0 °C)							
	1413								
Method. BCL-CAL Cond.									
ICV1 @COND									
Determination start	2017-07-28 08:34:48	(23.8 °C)							
	1007.70								
Method. BCL-Cond									
B1-BS1 @COND									
Determination start	2017-07-28 08:36:26	(23.8 °C)							
	318.30								
Method. BCL-Cond									
pH Calibration									
Determination start	2017-07-28 08:38:00								
Method. BCL-CAL-pH-5 BUFFERS									
B1-BS2 @pH									
Determination start	2017-07-28 08:54:13	(25.0 °C)							
	7.02								
Method. BCL-pH									
B1-BS3 @Alk									
Determination start	2017-07-28 08:57:23	(23.6 °C)							
	50	219.00	10.21	0.500	1.246	0.00	76.07	18.71	94.78
Method. BCL-Cond-pH-Alk									
B1-BLK1 @Alk									
Determination start	2017-07-28 09:03:08	(23.2 °C)							
	50	2.00	4.77	0.000	0.016	0.00	0.00	1.22	1.22
Method. BCL-Cond-pH-Alk-BLK1									
STD NAOH									
Determination start	2017-07-28 09:08:17								
						0.05508			
Method. BCL-STDIZE-NAOH									
1720715-02@B									
Determination start	2017-07-28 09:12:42	(18.2 °C)							
	50	408.20	6.55	0.000	1.194	0.00	0.00	90.82	90.82
Method. BCL-Cond-pH-Alk									
... 2017-07-28 09:19:22									



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start (18.9 °C) (22.2 °C)									
1720715-02@B	50	408.30	6.57	0.000	1.170	0.00	0.00	89.00	89.00
Determination start 2017-07-28 09:25:52									
B1-DUP1	50	408.70	6.57	0.000	1.172	0.00	0.00	89.15	89.15
Determination start 2017-07-28 09:32:21									
1720715-01@B	25	3101.70	5.08	0.000	0.894	0.00	0.00	136.01	136.01
Determination start 2017-07-28 09:38:37									
BLK1		11.60							
Determination start 2017-07-28 09:40:19									
1720671-01@A	50	310.80	8.03	0.000	0.924	0.00	0.00	70.29	70.29
Determination start 2017-07-28 09:46:19									
1720671-02@A	50	233.90	7.23	0.000	0.802	0.00	0.00	61.01	61.01
Determination start 2017-07-28 09:51:41									
1720671-03@A	50	241.40	7.01	0.000	0.758	0.00	0.00	57.66	57.66
Determination start 2017-07-28 09:56:55									
1720672-01@A	50	317.80	7.94	0.000	0.664	0.00	0.00	50.51	50.51
Determination start 2017-07-28 10:02:52									
1720672-02@A	50	323.10	7.54	0.000	0.762	0.00	0.00	57.96	57.96



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 10:08:14									
		(22.3 °C)	(24.2 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720672-03@A	50	321.80	7.61	0.000	0.734	0.00	0.00	55.83	55.83
Determination start 2017-07-28 10:13:31									
		(22.3 °C)	(24.2 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720666-01@D	50	716.50	7.99	0.000	1.728	0.00	0.00	131.44	131.44
Determination start 2017-07-28 10:19:16									
		(22.7 °C)	(24.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720690-01@A	50	367.20	9.21	0.158	0.808	0.00	24.04	37.42	61.46
Determination start 2017-07-28 10:25:36									
		(23.3 °C)					Method.	BCL-Cond	
B2-BS1 @COND		318.30							
Determination start 2017-07-28 10:27:19									
		(25.1 °C)					Method.	BCL-pH	
B2-BS2@PH		7.02							
Determination start 2017-07-28 10:30:43									
		(23.5 °C)	(25.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B2-BS3@ALK	50	205.40	10.08	0.414	1.206	0.00	62.98	28.75	91.74
Determination start 2017-07-28 10:36:31									
		(23.3 °C)	(24.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk-BLK1	
B2-BLK1	50	1.60	4.69	0.000	0.010	0.00	0.00	0.76	0.76
Determination start 2017-07-28 10:41:39									
		(22.6 °C)	(24.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720690-01@ARE1	50	364.30	9.35	0.208	0.858	0.00	31.64	33.62	65.26
Determination start 2017-07-28 10:53:39									
					Titer	0.04918	Method.	BCL-STDIZE-NAOH	
STD NAOH									



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
1720385-01@D	25	2017-07-28 11:00:51 (25.3 °C) 7.76		0.124		0.0492		Method. BCL-CO2-25 ML	
1720385-01@D	25	2017-07-28 11:05:45 (25.3 °C) 7.78		0.118		0.0492		Method. BCL-CO2-25 ML	
B1-DUP1	25	2017-07-28 11:10:42 (25.2 °C) 7.78		0.120		0.0492		Method. BCL-CO2-25 ML	
1720386-01@D	25	2017-07-28 11:15:39 (25.2 °C) 7.17		7.088		0.0492		Method. BCL-CO2-25 ML	
1720387-01@D	25	2017-07-28 11:57:08 (25.8 °C) 7.62		0.362		0.0492		Method. BCL-CO2-25 ML	
1720388-01@D	25	2017-07-28 12:02:32 (25.5 °C) 7.66		0.228		0.0492		Method. BCL-CO2-25 ML	
1720389-01@D	25	2017-07-28 12:07:37 (25.4 °C) 7.70		0.260		0.0492		Method. BCL-CO2-25 ML	
1720390-01@D	25	2017-07-28 12:12:48 (25.8 °C) 9.67		0.000		0.0492		Method. BCL-CO2-25 ML	
1720313-08@H	50	2017-07-28 12:17:00 (20.7 °C) 649.50 7.60		3.442		0.076	0.000	Method. BCL-Cond-pH-Alk	261.82



Alkalinity as CaCO3, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 12:23:46									
		(20.9 °C)			Titer	0.076	Method.	BCL-Cond-pH-Alk	
B2-DUP1	50	648.90	7.46	0.000	3.234	0.00	0.00	246.00	246.00
Determination start 2017-07-28 12:30:00									
		(26.5 °C)					Method.	BCL-Cond	
BLK1		4.40							
Determination start 2017-07-28 12:31:42									
		(21.6 °C)			Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720313-09@G	50	648.00	7.35	0.000	3.192	0.00	0.00	242.80	242.80
Determination start 2017-07-28 12:37:50									
		(26.1 °C)					Method.	BCL-Cond	
BLK1		4.40							
Determination start 2017-07-28 12:39:32									
		(22.0 °C)			Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720331-01@Y	25	6610.30	7.36	0.000	0.526	0.00	0.00	80.02	80.02
Determination start 2017-07-28 12:45:16									
		(26.0 °C)					Method.	BCL-Cond	
BLK1		14.00							
Determination start 2017-07-28 12:47:17									
		(22.1 °C)			Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720331-02@Y	25	3894.40	7.22	0.000	1.186	0.00	0.00	180.43	180.43
Determination start 2017-07-28 12:53:12									
		(25.8 °C)					Method.	BCL-Cond	
BLK1		11.70							
Determination start 2017-07-28 12:55:12									
		(22.6 °C)			Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720332-01@Y	25	5943.60	7.37	0.000	0.494	0.00	0.00	75.15	75.15



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-28 13:01:00 (25.7 °C) 14.60 Method. BCL-Cond								
1720332-02@Y	25	4537.30	7.22 (25.7 °C)	0.000	1.860	0.00	0.00	282.97	282.97
	Determination start 2017-07-28 13:03:01 (23.0 °C) (25.7 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 13:09:15 (25.5 °C) 17.10 Method. BCL-Cond								
1720332-03@Y	25	5386.30	7.50 (25.9 °C)	0.000	1.230	0.00	0.00	187.12	187.12
	Determination start 2017-07-28 13:11:14 (23.3 °C) (25.9 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 13:17:17 (25.4 °C) 15.80 Method. BCL-Cond								
1720361-01@C	25	1480.90	8.39 (25.8 °C)	0.030	0.874	0.00	9.13	123.84	132.96
	Determination start 2017-07-28 13:19:17 (23.2 °C) (25.8 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 13:25:10 (25.3 °C) 9.40 Method. BCL-Cond								
1720405-03@H	25	2268.90	6.92 (25.7 °C)	0.000	1.046	0.00	0.00	159.13	159.13
	Determination start 2017-07-28 13:26:53 (23.1 °C) (25.7 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 13:32:33 (25.2 °C) 11.50 Method. BCL-Cond								



..... Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 13:34:14									
		(23.8 °C)	(26.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-04@H	50	696.20	7.71	0.000	3.062	0.00	0.00	232.91	232.91
Determination start 2017-07-28 13:40:08									
		(25.2 °C)					Method.	BCL-Cond	
BLK1		9.30							
Determination start 2017-07-28 13:41:46									
		(24.5 °C)					Method.	BCL-Cond	
B3-BS1@COND		321.30							
Determination start 2017-07-28 13:43:25									
		(26.7 °C)					Method.	BCL-pH	
B3-BS2@PH		7.01							
Determination start 2017-07-28 13:46:50									
		(24.7 °C)	(26.9 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B3-BS3@ALK	50	198.60	9.84	0.324	1.232	0.00	49.29	44.42	93.71
Determination start 2017-07-28 13:52:37									
		(24.4 °C)	(26.7 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk-BLK1	
B3-BLK1	50	1.80	4.96	0.000	0.024	0.00	0.00	1.83	1.83
Determination start 2017-07-28 13:58:05									
		(24.1 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-06@G	50	296.40	7.95	0.000	1.378	0.00	0.00	104.82	104.82
Determination start 2017-07-28 14:03:34									
		(24.1 °C)	(26.5 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B3-DUP1	50	296.50	7.96	0.000	1.364	0.00	0.00	103.75	103.75
Determination start 2017-07-28 14:09:02									
		(25.2 °C)					Method.	BCL-Cond	
BLK1		9.10							



Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 14:10:43									
		(24.1 °C)	(26.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-05@G	25	2900.60	7.10	0.000	2.146	0.00	0.00	326.48	326.48
Determination start 2017-07-28 14:16:35									
		(25.1 °C)					Method.	BCL-Cond	
BLK1		13.70							
Determination start 2017-07-28 14:18:17									
		(24.3 °C)	(27.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-07@A	25	24353.30	7.71	0.000	3.790	0.00	0.00	576.58	576.58
Determination start 2017-07-28 14:25:08									
		(25.3 °C)					Method.	BCL-Cond	
BLK1		23.70							
Determination start 2017-07-28 14:27:10									
		(24.3 °C)	(27.1 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-08@A	25	23411.60	8.09	0.000	5.068	0.00	0.00	771.01	771.01
Determination start 2017-07-28 14:34:03									
		(25.3 °C)					Method.	BCL-Cond	
BLK1		27.00							
Determination start 2017-07-28 14:36:04									
		(24.1 °C)	(27.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-09@A	25	41151.80	7.60	0.000	1.002	0.00	0.00	152.44	152.44
Determination start 2017-07-28 14:41:50									
		(25.3 °C)					Method.	BCL-Cond	
BLK1		35.00							
Determination start 2017-07-28 14:43:52									
		(24.2 °C)	(27.0 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720405-11@A	25	23490.60	8.10	0.000	5.072	0.00	0.00	771.62	771.62



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-28 14:50:47 (25.3 °C) 30.40 Method. BCL-Cond								
1720405-13@G	25	1435.90	7.69 (24.1 °C) (26.9 °C)	0.000	1.712	0.00	0.00	260.45	260.45
	Determination start 2017-07-28 14:52:48 (25.3 °C) 19.50 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 14:58:26 (25.3 °C) 19.50 Method. BCL-Cond								
1720405-14@G	25	1150.80	7.39 (24.1 °C) (26.9 °C)	0.000	1.036	0.00	0.00	157.61	157.61
	Determination start 2017-07-28 15:00:07 (25.3 °C) 19.20 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 15:05:36 (25.3 °C) 19.20 Method. BCL-Cond								
1720405-15@G	25	1190.40	6.71 (24.3 °C) (26.9 °C)	0.000	0.576	0.00	0.00	87.63	87.63
	Determination start 2017-07-28 15:07:18 (25.3 °C) 18.80 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 15:13:04 (25.3 °C) 18.80 Method. BCL-Cond								
1720405-17@G	50	510.50	8.18 (24.3 °C) (26.5 °C)	0.000	1.194	0.00	0.00	90.82	90.82
	Determination start 2017-07-28 15:14:46 (25.2 °C) 17.90 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 15:20:12 (25.2 °C) 17.90 Method. BCL-Cond								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 15:21:51 (24.4 °C) 324.40									
B4-BS1@COND									
Determination start 2017-07-28 15:23:44 (26.8 °C) 7.01									
B4-BS2@PH									
Determination start 2017-07-28 15:27:12 (24.4 °C) (26.6 °C)									
B4-BS3@ALK	50	200.50	9.92	0.350	1.214	0.00	53.25	39.10	92.34
Determination start 2017-07-28 15:32:58 (24.6 °C) (26.6 °C)									
B4-BLK1	50	1.30	5.02	0.000	0.024	0.00	0.00	1.83	1.83
Determination start 2017-07-28 15:38:27 (24.3 °C) (26.5 °C)									
1720444-01@D	50	730.40	8.03	0.000	2.582	0.00	0.00	196.40	196.40
Determination start 2017-07-28 15:44:19 (24.3 °C) (26.4 °C)									
B4-DUP1	50	729.60	8.04	0.000	2.566	0.00	0.00	195.19	195.19
Determination start 2017-07-28 15:50:12 (27.7 °C) 1.40									
BLK1									
Determination start 2017-07-28 15:51:54 (24.5 °C) (26.9 °C)									
1720406-01@A	25	2014.80	8.19	0.000	5.810	0.00	0.00	883.89	883.89
Determination start 2017-07-28 15:58:34 (27.2 °C) 3.00									
BLK1									



Alkalinity as CaCO3, mg/l

Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
1720408-01@A	Determination start 2017-07-28 16:00:30 (24.7 °C)	1121.40	6.07	0.000	1.446	0.00	0.00	219.98	219.98
BLK1	Determination start 2017-07-28 16:06:46 (26.7 °C)	1.80							
1720411-01@A	Determination start 2017-07-28 16:08:27 (24.5 °C)	973.80	5.65	0.000	3.752	0.00	0.00	285.40	285.40
BLK1	Determination start 2017-07-28 16:17:58 (26.4 °C)	2.10							
1720415-01@D	Determination start 2017-07-28 16:19:40 (24.4 °C)	593.10	9.49	0.566	2.238	0.00	86.11	84.13	170.24
BLK1	Determination start 2017-07-28 16:26:01 (26.1 °C)	2.40							
1720448-01@A	Determination start 2017-07-28 16:27:43 (24.3 °C)	1053.80	7.51	0.000	1.428	0.00	0.00	217.25	217.25
BLK1	Determination start 2017-07-28 16:33:41 (26.0 °C)	1.90							
1720448-02@A	Determination start 2017-07-28 16:35:22 (24.3 °C)	802.50	7.96	0.000	1.714	0.00	0.00	130.38	130.38



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-28 16:40:56 (25.9 °C) 2.00								
1720455-01@A	25	1194.50	5.84 (24.5 °C)	0.000	1.562	0.00	0.00	237.63	237.63
	Determination start 2017-07-28 16:42:37 (24.5 °C)								
BLK1	Determination start 2017-07-28 16:49:05 (25.7 °C) 3.10								
1720481-01@A	50	739.40	7.18 (24.9 °C)	0.000	2.622	0.00	0.00	199.45	199.45
	Determination start 2017-07-28 16:50:46 (24.9 °C)								
BLK1	Determination start 2017-07-28 16:57:06 (30.9 °C) 0.90								
1720483-01@D	50	619.10	8.00 (25.3 °C)	0.000	1.554	0.00	0.00	118.21	118.21
	Determination start 2017-07-28 16:58:48 (25.3 °C)								
BLK1	Determination start 2017-07-28 17:04:15 (30.0 °C) 1.40								
B5-BS1 @COND	Determination start 2017-07-28 17:05:53 (25.5 °C) 326.70								
B5-BS2@PH	Determination start 2017-07-28 17:07:27 (26.9 °C) 7.01								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-28 17:10:46									
		(25.0 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B5-BS3@ALK	50	205.80	10.00	0.396	1.236	0.00	60.24	33.77	94.02
Determination start 2017-07-28 17:16:28									
		(25.1 °C)	(26.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk-BLK1	
B5-BLK1	50	1.60	4.73	0.000	0.014	0.00	0.00	1.06	1.06
Determination start 2017-07-28 17:21:41									
		(25.1 °C)	(26.7 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720498-01@A	50	25.00	7.01	0.000	0.174	0.00	0.00	13.24	13.24
Determination start 2017-07-28 17:27:13									
		(24.8 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
B5-DUP1	50	25.60	7.06	0.000	0.172	0.00	0.00	13.08	13.08
Determination start 2017-07-28 17:31:56									
		(27.7 °C)					Method.	BCL-Cond	
BLK1		0.60							
Determination start 2017-07-28 17:33:38									
		(25.0 °C)	(26.8 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720488-01@I	25	45072.80	7.68	0.000	19.232	0.00	0.00	2925.81	2925.81
Determination start 2017-07-28 17:44:42									
		(27.2 °C)					Method.	BCL-Cond	
BLK1		17.20							
Determination start 2017-07-28 17:46:44									
		(25.0 °C)	(26.6 °C)		Titer	0.076	Method.	BCL-Cond-pH-Alk	
1720495-01@A	50	67.60	7.21	0.000	0.294	0.00	0.00	22.36	22.36
Determination start 2017-07-28 17:51:53									
		(26.7 °C)					Method.	BCL-Cond	
BLK1		5.80							



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
1720496-01@A	50	52.40 (24.8 °C) 2017-07-28 17:53:36 (26.5 °C)	7.12	0.000	0.210	0.00	0.00	15.97	15.97
BLK1	Determination start Method. BCL-Cond-pH-Alk (26.5 °C) 6.20 Method. BCL-Cond								
1720497-01@A	50	167.00 (24.8 °C) 2017-07-28 18:00:26 (26.4 °C)	8.42	0.028	0.552	0.00	4.26	37.73	41.99
BLK1	Determination start Method. BCL-Cond (26.2 °C) 6.40 Method. BCL-Cond-pH-Alk								
1720505-01@D	25	21171.30 (24.8 °C) 2017-07-28 18:08:08 (26.7 °C)	7.30	0.000	4.630	0.00	0.00	704.37	704.37
BLK1	Determination start Method. BCL-Cond (26.1 °C) 18.40 Method. BCL-Cond-pH-Alk								
1720505-02@D	25	18166.90 (24.8 °C) 2017-07-28 18:16:54 (26.8 °C)	7.56	0.000	5.344	0.00	0.00	813.00	813.00
BLK1	Determination start Method. BCL-Cond (25.9 °C) 19.10 Method. BCL-Cond-pH-Alk								
1720505-03@D	25	19269.30 (24.7 °C) 2017-07-28 18:25:36 (26.7 °C)	7.49	0.000	4.702	0.00	0.00	715.33	715.33
BLK1	Determination start Method. BCL-Cond-pH-Alk (26.7 °C) 7.49 Method. BCL-Cond-pH-Alk								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
BLK1	Determination start 2017-07-28 18:32:09 (25.8 °C) 19.80 Method. BCL-Cond								
1720505-04@D	25	18592.30	7.56 (26.7 °C)	0.000	5.470	0.00	0.00	832.16	832.16
	Determination start 2017-07-28 18:34:10 (24.6 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 18:41:05 (25.7 °C) 20.30 Method. BCL-Cond								
1720505-05@D	25	37743.60	7.86 (26.7 °C)	0.000	18.044	0.00	0.00	2745.08	2745.08
	Determination start 2017-07-28 18:43:07 (24.7 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
BLK1	Determination start 2017-07-28 18:52:56 (25.6 °C) 26.20 Method. BCL-Cond								
B6-BS1@COND	Determination start 2017-07-28 18:54:55 (24.6 °C) 329.00 Method. BCL-Cond								
B6-BS2@PH	Determination start 2017-07-28 18:56:39 (26.5 °C) 7.00 Method. BCL-pH								
B6-BS3@ALK	50	197.30	9.88 (26.3 °C)	0.332	1.206	0.00	50.51	41.23	91.74
	Determination start 2017-07-28 19:00:07 (24.4 °C) Titer 0.076 Method. BCL-Cond-pH-Alk								
B6-BLK1	50	3.20	4.93 (26.3 °C)	0.000	0.022	0.00	0.00	1.67	1.67
	Determination start 2017-07-28 19:06:02 (24.3 °C) Titer 0.076 Method. BCL-Cond-pH-Alk-BLK1								



Sample ID	Sample Vol., ml	Cond., µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
1720550-05@A	Determination start 2017-07-28 19:11:34 (24.4 °C) 859.30	7.57	0.000	2.238	0.00	0.076	Method.	BCL-Cond-pH-Alk	170.24
B6-DUP1	Determination start 2017-07-28 19:18:14 (24.3 °C) 861.50	7.54	0.000	2.226	0.00	0.076	Method.	BCL-Cond-pH-Alk	169.32
1720617-01@A	Determination start 2017-07-28 19:24:40 (24.3 °C) 418.30	7.94	0.000	0.968	0.00	0.076	Method.	BCL-Cond-pH-Alk	73.63
1720632-01@A	Determination start 2017-07-28 19:30:04 (24.3 °C) 264.60	6.86	0.000	0.860	0.00	0.076	Method.	BCL-Cond-pH-Alk	65.42
10000	Determination start 2017-07-28 19:35:38 (24.2 °C) 10101.30						Method.	BCL-Cond	
303	Determination start 2017-07-28 19:37:35 (24.4 °C) 331.80						Method.	BCL-Cond	
7.00	Determination start 2017-07-28 19:39:19 (26.3 °C) 7.00						Method.	BCL-pH	



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B|G2111

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720393-01 A	i150.1w pH PQL=0.05	7/27/2017 8:30AM		50	50					
1720393-01 A	i310.1w CO3	7/27/2017 8:30AM		50	50					
1720393-01 A	i310.1w CO3 Alk as CaCO3 PQ	7/27/2017 8:30AM		50	50					
1720393-01 A	i310.1w HCO3	7/27/2017 8:30AM		50	50					
1720393-01 A	i310.1w HCO3 Alk as CaCO3 P	7/27/2017 8:30AM		50	50					
1720393-01 A	i310.1w OH Alk as CaCO3 PQI	7/27/2017 8:30AM		50	50					
1720393-01 A	i310.1w Tot Alk as CaCO3	7/27/2017 8:30AM		50	50					
1720393-01 A	iSM2320Bw HCO3	7/27/2017 8:30AM	RML	50	50					
1720393-01 A	iSM2320Bw Tot Alk as CaCO3	7/27/2017 8:30AM	RML	50	50					
1720393-01 A	iSM4500HBw pH	7/27/2017 8:30AM	RML	50	50					
1720393-01 A	i120.1w EC PQL=1	7/27/2017 8:30AM		50	50					
1720400-01 D	i310.1w CO3 Alk as CaCO3 PQ	7/27/2017 8:30AM	RML	50	50					
1720400-01 D	i310.1w HCO3 Alk as CaCO3 P	7/27/2017 8:30AM	RML	50	50					
1720400-01 D	i150.1w pH PQL=0.05	7/27/2017 8:30AM	RML	50	50					
1720400-01 D	i120.1w EC PQL=1	7/27/2017 8:30AM	RML	50	50					
1720400-01 D	i310.1w OH Alk as CaCO3 PQI	7/27/2017 8:30AM	RML	50	50					
1720400-03 D	i120.1w EC PQL=1	7/27/2017 8:30AM	RML	50	50					
1720400-03 D	i150.1w pH PQL=0.05	7/27/2017 8:30AM	RML	50	50					
1720400-03 D	i310.1w CO3 Alk as CaCO3 PQ	7/27/2017 8:30AM	RML	50	50					
1720400-03 D	i310.1w HCO3 Alk as CaCO3 P	7/27/2017 8:30AM	RML	50	50					
1720400-03 D	i310.1w OH Alk as CaCO3 PQI	7/27/2017 8:30AM	RML	50	50					
1720400-05 D	i120.1w EC PQL=1	7/27/2017 8:30AM	RML	50	50					
1720400-05 D	i150.1w pH PQL=0.05	7/27/2017 8:30AM	RML	50	50					
1720400-05 D	i310.1w CO3 Alk as CaCO3 PQ	7/27/2017 8:30AM	RML	50	50					
1720400-05 D	i310.1w HCO3 Alk as CaCO3 P	7/27/2017 8:30AM	RML	50	50					



PREPARATION BENCH SHEET

B[G2111

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720400-05 D	i310.1w OH Alk as CaCO3 PQL	7/27/2017 8:30AM	RML	50	50					
1720400-07 D	i310.1w HCO3 Alk as CaCO3 P	7/27/2017 8:30AM	RML	50	50					
1720400-07 D	i120.1w EC PQL=1	7/27/2017 8:30AM	RML	50	50					
1720400-07 D	i310.1w CO3 Alk as CaCO3 PQ	7/27/2017 8:30AM	RML	50	50					
1720400-07 D	i310.1w OH Alk as CaCO3 PQL	7/27/2017 8:30AM	RML	50	50					
1720400-07 D	i150.1w pH PQL=0.05	7/27/2017 8:30AM	RML	50	50					
1720400-09 D	i310.1w OH Alk as CaCO3 PQL	7/27/2017 8:30AM	RML	50	50					
1720400-09 D	i120.1w EC PQL=1	7/27/2017 8:30AM	RML	50	50					
1720400-09 D	i150.1w pH PQL=0.05	7/27/2017 8:30AM	RML	50	50					
1720400-09 D	i310.1w CO3 Alk as CaCO3 PQ	7/27/2017 8:30AM	RML	50	50					
1720400-09 D	i310.1w HCO3 Alk as CaCO3 P	7/27/2017 8:30AM	RML	50	50					
1720400-11 D	i310.1w OH Alk as CaCO3 PQL	7/27/2017 8:30AM	RML	50	50					
1720400-11 D	i310.1w HCO3 Alk as CaCO3 P	7/27/2017 8:30AM	RML	50	50					
1720400-11 D	i310.1w CO3 Alk as CaCO3 PQ	7/27/2017 8:30AM	RML	50	50					
1720400-11 D	i120.1w EC PQL=1	7/27/2017 8:30AM	RML	50	50					
1720400-11 D	i150.1w pH PQL=0.05	7/27/2017 8:30AM	RML	50	50					
1720400-13 D	i120.1w EC PQL=1	7/27/2017 8:30AM	RML	50	50					
1720400-13 D	i310.1w OH Alk as CaCO3 PQL	7/27/2017 8:30AM	RML	50	50					
1720400-13 D	i310.1w HCO3 Alk as CaCO3 P	7/27/2017 8:30AM	RML	50	50					
1720400-13 D	i150.1w pH PQL=0.05	7/27/2017 8:30AM	RML	50	50					
1720400-13 D	i310.1w CO3 Alk as CaCO3 PQ	7/27/2017 8:30AM	RML	50	50					
1720405-01 G	i310.1w Tot Alk as CaCO3	7/27/2017 8:30AM	RML	50	50					
1720543-01 D	i310.1w CO3	7/27/2017 8:30AM	RML	50	50					
1720543-01 D	i310.1w HCO3	7/27/2017 8:30AM	RML	50	50					
B[G2111-BLK1	QC	7/27/2017 8:30AM	RML	50	50					



PREPARATION BENCH SHEET

B[G2111

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
B[G2111-BS1	QC	7/27/2017 8:30AM	RML	50	50	7G27012		50000		
B[G2111-BS2	QC	7/27/2017 8:30AM	RML	50	50	7G11062		50000		
B[G2111-BS3	QC	7/27/2017 8:30AM	RML	50	50	7G27013		5000		
B[G2111-DUP1	QC	7/27/2017 8:30AM	RML	50	50		1720393-01			

Spike Mixes	Description	Solvent	Prepared	Expires
7G11062	pH 7 LCSW Check	H2O	7/11/2017 by ** Vendor **	2/28/2019
7G27012	EC LCSW WORKING	H2O (DI)	7/26/2017 by Rosa Ledesma	1/26/2018
7G27013	ALK NA2CO3	H2O	5/31/2017 by Rosa Ledesma	10/31/2017



PREPARATION BENCH SHEET

B[G2116

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Table with columns: Lab Number, Analysis, Prepared, By, Initial (ml), Final (ml), Spike ID, Source ID, ul Spike, ul Surrogate, % Solids. Contains 30 rows of data.



PREPARATION BENCH SHEET

B[G2116

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720332-03 N	iSM2320Bw HCO3	7/28/2017 8:30AM	RML	50	50					
1720332-03 N	iSM2320Bw OH	7/28/2017 8:30AM	RML	50	50					
1720361-01 C	iSM2320Bw OH	7/28/2017 8:30AM	RML	50	50					
1720361-01 C	ISM2510Bw EC	7/28/2017 8:30AM	RML	50	50					
1720361-01 C	iSM2320Bw HCO3	7/28/2017 8:30AM	RML	50	50					
1720361-01 C	iSM2320Bw CO3	7/28/2017 8:30AM	RML	50	50					
1720361-01 C	i150.1w pH	7/28/2017 8:30AM	RML	50	50					
1720405-03 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-04 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
B[G2116-BLK1	QC	7/28/2017 8:30AM	RML	50	50					
B[G2116-BS1	QC	7/28/2017 8:30AM	RML	50	50	7G27012		50000		
B[G2116-BS2	QC	7/28/2017 8:30AM	RML	50	50	7G11062		50000		
B[G2116-BS3	QC	7/28/2017 8:30AM	RML	50	50	7G27013		5000		
B[G2116-DUP1	QC	7/28/2017 8:30AM	RML	50	50		1720313-08			

Spike Mixes	Description	Solvent	Prepared	Expires
7G11062	pH 7 LCSW Check	H2O	7/11/2017 by ** Vendor **	2/28/2019
7G27012	EC LCSW WORKING	H2O (DI)	7/26/2017 by Rosa Ledesma	1/26/2018
7G27013	ALK NA2CO3	H2O	5/31/2017 by Rosa Ledesma	10/31/2017



PREPARATION BENCH SHEET

B[G2117

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720405-05 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-06 G	i120.1w EC	7/28/2017 8:30AM		50	50					
1720405-06 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-07 A	i120.1w EC	7/28/2017 8:30AM	RML	50	50					
1720405-08 A	i120.1w EC	7/28/2017 8:30AM	RML	50	50					
1720405-09 A	i120.1w EC	7/28/2017 8:30AM	RML	50	50					
1720405-11 A	i120.1w EC	7/28/2017 8:30AM	RML	50	50					
1720405-13 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-14 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-15 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
1720405-17 G	i310.1w Tot Alk as CaCO3	7/28/2017 8:30AM	RML	50	50					
B[G2117-BLK1	QC	7/28/2017 8:30AM	RML	50	50					
B[G2117-BS1	QC	7/28/2017 8:30AM	RML	50	50	7G27012		50000		
B[G2117-BS2	QC	7/28/2017 8:30AM	RML	50	50	7G11062		50000		
B[G2117-BS3	QC	7/28/2017 8:30AM	RML	50	50	7G27013		5000		
B[G2117-DUP1	QC	7/28/2017 8:30AM	RML	50	50		1720405-06			

Spike Mixes	Description	Solvent	Prepared	Expires
7G11062	pH 7 LCSW Check	H2O	7/11/2017 by ** Vendor **	2/28/2019
7G27012	EC LCSW WORKING	H2O (DI)	7/26/2017 by Rosa Ledesma	1/26/2018
7G27013	ALK NA2CO3	H2O	5/31/2017 by Rosa Ledesma	10/31/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713352

Instrument: MET-1

Calibration ID:

Sequence Date: 07/27/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713352-ICV1	QC		1		7B07020		
B[G2107-BS1	QC		2				
B[G2107-BS2	QC		3				
B[G2107-BLK1	QC		4				
1720267-08	i120.1w EC	G	5				BatchQC
1720267-08	i150.1w pH	G	5				BatchQC
1720267-08	i310.1w CO3	G	5				BatchQC
1720267-08	i310.1w HCO3	G	5				BatchQC
1720267-08	i310.1w OH	G	5				BatchQC
1720267-08	i310.1w Tot Alk as CaCO3	G	5				
1720267-08	iSM2320Bw CO3	G	5				BatchQC
1720267-08	iSM2320Bw HCO3	G	5				BatchQC
B[G2107-DUP1	QC		6				
1720267-02	i310.1w Tot Alk as CaCO3	D	7				
1720267-03	i310.1w Tot Alk as CaCO3	D	8				
1720267-04	i310.1w Tot Alk as CaCO3	G	9				
1720267-09	i310.1w Tot Alk as CaCO3	G	10				
1720267-10	i310.1w Tot Alk as CaCO3	G	11				
1720267-11	i310.1w Tot Alk as CaCO3	G	12				
1720269-01	i120.1w EC	D	13				
1720269-01	i150.1w pH	D	13				
1720277-01	i120.1w EC	G	14				
1720277-01	i150.1w pH	G	14				
1720277-01	i310.1w CO3	G	14				
1720277-01	i310.1w HCO3	G	14				
1720277-01	i310.1w OH	G	14				
1720312-01	iSM2320Bw CO3	A	15				
1720312-01	iSM2320Bw HCO3	A	15				
B[G2108-BS1	QC		16				
B[G2108-BS2	QC		17				
B[G2108-BS3	QC		18				
B[G2108-BLK1	QC		19				
1720318-01	i120.1w EC	D	20				BatchQC
1720318-01	i150.1w pH	D	20				
1720318-01	i310.1w CO3 Alk as CaCO3	D	20				
1720318-01	i310.1w HCO3 Alk as CaCO3	D	20				
1720318-01	i310.1w Tot Alk as CaCO3	D	20				
1720318-01	iSM2320Bw CO3	D	20				BatchQC
1720318-01	iSM2320Bw CO3 Alk as CaCO3	D	20				BatchQC



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1713352

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Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720318-01	iSM2320Bw HCO3	D	20				BatchQC
1720318-01	iSM2320Bw HCO3 Alk as CaCC	D	20				BatchQC
1720318-01	iSM2320Bw OH	D	20				BatchQC
1720318-01	ISM2510Bw EC	D	20				
1720318-01	iSM4500HBw pH	D	20				BatchQC
B[G2108-DUP1	QC		21				
1720312-02	ISM2510Bw EC	A	22				
1720312-02	iSM4500HBw pH	A	22				
1720315-01	iSM2320Bw CO3 Alk as CaCO3	D	23				
1720315-01	iSM2320Bw HCO3 Alk as CaCC	D	23				
1720318-02	i150.1w pH	D	24				
1720318-02	i310.1w CO3 Alk as CaCO3	D	24				
1720318-02	i310.1w HCO3 Alk as CaCO3	D	24				
1720318-02	i310.1w Tot Alk as CaCO3	D	24				
1720318-02	ISM2510Bw EC	D	24				
1720318-03	i150.1w pH	D	25				
1720318-03	i310.1w CO3 Alk as CaCO3	D	25				
1720318-03	i310.1w HCO3 Alk as CaCO3	D	25				
1720318-03	i310.1w Tot Alk as CaCO3	D	25				
1720318-03	ISM2510Bw EC	D	25				
1720318-04	i150.1w pH	D	26				
1720318-04	i310.1w CO3 Alk as CaCO3	D	26				
1720318-04	i310.1w HCO3 Alk as CaCO3	D	26				
1720318-04	i310.1w Tot Alk as CaCO3	D	26				
1720318-04	ISM2510Bw EC	D	26				
1720337-02	i150.1w pH	G	27				
1720337-02	iSM2320Bw CO3	G	27				
1720337-02	iSM2320Bw HCO3	G	27				
1720337-02	iSM2320Bw OH	G	27				
1720337-02	ISM2510Bw EC	G	27				
1720342-02	i120.1w EC	A	28				
1720343-01	i150.1w pH	D	29				
1720343-01	iSM2320Bw CO3	D	29				
1720343-01	iSM2320Bw HCO3	D	29				
1720343-01	iSM2320Bw OH	D	29				
1720343-01	ISM2510Bw EC	D	29				
B[G2109-BS1	QC		30				
B[G2109-BS2	QC		31				
B[G2109-BS3	QC		32				



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Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
B[G2109-BLK1	QC		33				
1720350-01	i120.1w EC	A	34				
1720350-01	i150.1w pH	A	34				
1720350-01	i310.1w CO3	A	34				
1720350-01	i310.1w HCO3	A	34				
1720350-01	i310.1w OH	A	34				
1720350-01	i310.1w Tot Alk as CaCO3	A	34				BatchQC
1720350-01	iSM4500HBw pH	A	34				BatchQC
B[G2109-DUP1	QC		35				
1720344-01	i120.1w EC	A	36				
1720344-01	i310.1w Tot Alk as CaCO3	A	36				
1720344-01	iSM4500HBw pH	A	36				
1720344-02	i120.1w EC	A	37				
1720344-02	i310.1w Tot Alk as CaCO3	A	37				
1720344-02	iSM4500HBw pH	A	37				
1720345-01	i120.1w EC	A	38				
1720345-01	i150.1w pH	A	38				
1720345-01	i310.1w Tot Alk as CaCO3	A	38				
1720350-02	i120.1w EC	A	39				
1720350-02	i150.1w pH	A	39				
1720350-02	i310.1w CO3	A	39				
1720350-02	i310.1w HCO3	A	39				
1720350-02	i310.1w OH	A	39				
1720350-03	i120.1w EC	A	40				
1720350-03	i150.1w pH	A	40				
1720350-03	i310.1w CO3	A	40				
1720350-03	i310.1w HCO3	A	40				
1720350-03	i310.1w OH	A	40				
1720350-04	i120.1w EC	A	41				
1720350-04	i150.1w pH	A	41				
1720350-04	i310.1w CO3	A	41				
1720350-04	i310.1w HCO3	A	41				
1720350-04	i310.1w OH	A	41				
1720350-05	i120.1w EC	A	42				
1720350-05	i150.1w pH	A	42				
1720350-05	i310.1w CO3	A	42				
1720350-05	i310.1w HCO3	A	42				
1720350-05	i310.1w OH	A	42				
1720350-06	i120.1w EC	A	43				



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Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720350-06	i150.1w pH	A	43				
1720350-06	i310.1w CO3	A	43				
1720350-06	i310.1w HCO3	A	43				
1720350-06	i310.1w OH	A	43				
1720350-07	i120.1w EC	A	44				
1720350-07	i150.1w pH	A	44				
1720350-07	i310.1w CO3	A	44				
1720350-07	i310.1w HCO3	A	44				
1720350-07	i310.1w OH	A	44				
B[G2110-BS1	QC		45				
B[G2110-BS2	QC		46				
B[G2110-BS3	QC		47				
B[G2110-BLK1	QC		48				
1720350-08	i120.1w EC	A	49				
1720350-08	i150.1w pH	A	49				
1720350-08	i310.1w CO3	A	49				
1720350-08	i310.1w HCO3	A	49				
1720350-08	i310.1w HCO3 Alk as CaCO3	A	49				BatchQC
1720350-08	i310.1w OH	A	49				
1720350-08	iSM2320Bw CO3 Alk as CaCO3	A	49				BatchQC
1720350-08	iSM2320Bw HCO3 Alk as CaCC	A	49				BatchQC
1720350-08	iSM2320Bw OH Alk as CaCO3	A	49				BatchQC
1720350-08	iSM2320Bw Tot Alk as CaCO3	A	49				BatchQC
B[G2110-DUP1	QC		50				
1720350-09	i120.1w EC	A	51				
1720350-09	i150.1w pH	A	51				
1720350-09	i310.1w CO3	A	51				
1720350-09	i310.1w HCO3	A	51				
1720350-09	i310.1w OH	A	51				
1720337-01	i150.1w pH	A	52				
1720337-01	iSM2320Bw CO3	A	52				
1720337-01	iSM2320Bw HCO3	A	52				
1720337-01	iSM2320Bw OH	A	52				
1720337-01	ISM2510Bw EC	A	52				
1720351-01	i310.1w HCO3 Alk as CaCO3	D	53				
1720351-02	i310.1w HCO3 Alk as CaCO3	D	54				
1720351-03	i310.1w HCO3 Alk as CaCO3	D	55				
1720352-01	i150.1w pH	I	56				
1720352-01	iSM2320Bw CO3 Alk as CaCO3	I	56				



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Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720352-01	iSM2320Bw HCO3 Alk as CaCC	I	56				
1720352-01	iSM2320Bw OH Alk as CaCO3	I	56				
1720352-01	iSM2320Bw Tot Alk as CaCO3	I	56				
1720353-01	i150.1w pH	J	57				
1720353-01	iSM2320Bw CO3 Alk as CaCO3	J	57				
1720353-01	iSM2320Bw HCO3 Alk as CaCC	J	57				
1720353-01	iSM2320Bw OH Alk as CaCO3	J	57				
1720353-01	iSM2320Bw Tot Alk as CaCO3	J	57				
1720355-01	i150.1w pH	I	58				
1720355-01	iSM2320Bw CO3 Alk as CaCO3	I	58				
1720355-01	iSM2320Bw HCO3 Alk as CaCC	I	58				
1720355-01	iSM2320Bw OH Alk as CaCO3	I	58				
1720355-01	iSM2320Bw Tot Alk as CaCO3	I	58				
1720356-01	i120.1w EC	A	59				
1720356-01	i150.1w pH	A	59				
1720356-01	i310.1w CO3	A	59				
1720356-01	i310.1w HCO3	A	59				
1720356-01	i310.1w OH	A	59				
1720360-01	i150.1w pH	A	60				
B[G2111-BS1	QC		61				
B[G2111-BS2	QC		62				
B[G2111-BS3	QC		63				
B[G2111-BLK1	QC		64				
1720393-01	i120.1w EC PQL=1	A	65				BatchQC
1720393-01	i150.1w pH PQL=0.05	A	65				BatchQC
1720393-01	i310.1w CO3	A	65				BatchQC
1720393-01	i310.1w CO3 Alk as CaCO3 PQL	A	65				BatchQC
1720393-01	i310.1w HCO3	A	65				BatchQC
1720393-01	i310.1w HCO3 Alk as CaCO3 PQL	A	65				BatchQC
1720393-01	i310.1w OH Alk as CaCO3 PQL	A	65				BatchQC
1720393-01	i310.1w Tot Alk as CaCO3	A	65				BatchQC
1720393-01	iSM2320Bw HCO3	A	65				
1720393-01	iSM2320Bw Tot Alk as CaCO3	A	65				
1720393-01	iSM4500HBw pH	A	65				
B[G2111-DUP1	QC		66				
1720400-01	i120.1w EC PQL=1	D	67				**
1720400-01	i150.1w pH PQL=0.05	D	67				**
1720400-01	i310.1w CO3 Alk as CaCO3 PQL	D	67				**
1720400-01	i310.1w HCO3 Alk as CaCO3 PQL	D	67				**



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Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720400-01	i310.1w OH Alk as CaCO3 PQL	D	67				**
1720400-03	i120.1w EC PQL=1	D	68				**
1720400-03	i150.1w pH PQL=0.05	D	68				**
1720400-03	i310.1w CO3 Alk as CaCO3 PQL	D	68				**
1720400-03	i310.1w HCO3 Alk as CaCO3 PQL	D	68				**
1720400-03	i310.1w OH Alk as CaCO3 PQL	D	68				**
1720400-05	i120.1w EC PQL=1	D	69				**
1720400-05	i150.1w pH PQL=0.05	D	69				**
1720400-05	i310.1w CO3 Alk as CaCO3 PQL	D	69				**
1720400-05	i310.1w HCO3 Alk as CaCO3 PQL	D	69				**
1720400-05	i310.1w OH Alk as CaCO3 PQL	D	69				**
1720400-07	i120.1w EC PQL=1	D	70				**
1720400-07	i150.1w pH PQL=0.05	D	70				**
1720400-07	i310.1w CO3 Alk as CaCO3 PQL	D	70				**
1720400-07	i310.1w HCO3 Alk as CaCO3 PQL	D	70				**
1720400-07	i310.1w OH Alk as CaCO3 PQL	D	70				**
1720400-09	i120.1w EC PQL=1	D	71				**
1720400-09	i150.1w pH PQL=0.05	D	71				**
1720400-09	i310.1w CO3 Alk as CaCO3 PQL	D	71				**
1720400-09	i310.1w HCO3 Alk as CaCO3 PQL	D	71				**
1720400-09	i310.1w OH Alk as CaCO3 PQL	D	71				**
1720400-11	i120.1w EC PQL=1	D	72				**
1720400-11	i150.1w pH PQL=0.05	D	72				**
1720400-11	i310.1w CO3 Alk as CaCO3 PQL	D	72				**
1720400-11	i310.1w HCO3 Alk as CaCO3 PQL	D	72				**
1720400-11	i310.1w OH Alk as CaCO3 PQL	D	72				**
1720400-13	i120.1w EC PQL=1	D	73				**
1720400-13	i150.1w pH PQL=0.05	D	73				**
1720400-13	i310.1w CO3 Alk as CaCO3 PQL	D	73				**
1720400-13	i310.1w HCO3 Alk as CaCO3 PQL	D	73				**
1720400-13	i310.1w OH Alk as CaCO3 PQL	D	73				**
1720405-01	i310.1w Tot Alk as CaCO3	G	74				
1720543-01	i310.1w CO3	D	75				
1720543-01	i310.1w HCO3	D	75				
B[G2112-BS1	QC		76				
B[G2112-BS2	QC		77				
B[G2112-BS3	QC		78				
B[G2112-BLK1	QC		79				
1720598-01	i120.1w EC	A	80				BatchQC



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Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720598-01	i150.1w pH	A	80				
1720598-01	i310.1w Tot Alk as CaCO3	A	80				BatchQC
B[G2112-DUP1	QC		81				
1720598-02	i150.1w pH	A	82				
1720598-03	i150.1w pH	A	83				
1720604-01	i150.1w pH	A	84				
1720604-02	i150.1w pH	A	85				
1720604-03	i150.1w pH	A	86				
1720108-08	i120.1w EC	A	87				
1720140-01	i150.1w pH	B	88				RUSH 6 DAY
1720313-05	i310.1w Tot Alk as CaCO3	V	89				
1720313-06	i310.1w Tot Alk as CaCO3	H	90				
B[G2113-BS1	QC		91				
B[G2113-BS2	QC		92				
B[G2113-BS3	QC		93				
B[G2113-BLK1	QC		94				
1720155-01	i150.1w pH	A	95				
1720155-01	i310.1w HCO3 Alk as CaCO3	A	95				BatchQC
1720155-01	iSM2320Bw CO3	A	95				
1720155-01	iSM2320Bw CO3 Alk as CaCO3	A	95				BatchQC
1720155-01	iSM2320Bw HCO3	A	95				
1720155-01	iSM2320Bw HCO3 Alk as CaCC	A	95				BatchQC
1720155-01	iSM2320Bw OH	A	95				
1720155-01	ISM2510Bw EC	A	95				
B[G2113-DUP1	QC		96				
1720147-15	iSM2320Bw CO3 Alk as CaCO3	A	97				
1720147-15	iSM2320Bw HCO3 Alk as CaCC	A	97				
1720147-15	ISM2510Bw EC	A	97				
1720147-16	iSM2320Bw CO3 Alk as CaCO3	A	98				
1720147-16	iSM2320Bw HCO3 Alk as CaCC	A	98				
1720147-16	ISM2510Bw EC	A	98				
1720147-17	iSM2320Bw CO3 Alk as CaCO3	A	99				
1720147-17	iSM2320Bw HCO3 Alk as CaCC	A	99				
1720147-17	ISM2510Bw EC	A	99				
1720147-18	iSM2320Bw CO3 Alk as CaCO3	A	100				
1720147-18	iSM2320Bw HCO3 Alk as CaCC	A	100				
1720147-18	ISM2510Bw EC	A	100				
1720147-19	iSM2320Bw CO3 Alk as CaCO3	A	101				
1720147-19	iSM2320Bw HCO3 Alk as CaCC	A	101				



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Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720147-19	ISM2510Bw EC	A	101				
1720154-01	i310.1w HCO3 Alk as CaCO3	D	102				
1720154-02	i310.1w HCO3 Alk as CaCO3	D	103				
1720154-03	i310.1w HCO3 Alk as CaCO3	D	104				
1720154-04	i310.1w HCO3 Alk as CaCO3	D	105				
B[G2114-BS1	QC		106				
B[G2114-BS2	QC		107				
B[G2114-BS3	QC		108				
B[G2114-BLK1	QC		109				
1720210-01	i120.1w EC	D	110				BatchQC
1720210-01	i150.1w pH	D	110				BatchQC
1720210-01	i310.1w CO3	D	110				
1720210-01	i310.1w HCO3	D	110				
1720210-01	i310.1w Tot Alk as CaCO3	D	110				
1720210-01	ISM2510Bw EC	D	110				BatchQC
B[G2114-DUP1	QC		111				
1720188-01	i120.1w EC	A	112				
1720188-01	i150.1w pH	A	112				
1720210-02	i310.1w CO3	D	113				
1720210-02	i310.1w HCO3	D	113				
1720210-02	i310.1w Tot Alk as CaCO3	D	113				
1720210-03	i310.1w CO3	D	114				
1720210-03	i310.1w HCO3	D	114				
1720210-03	i310.1w Tot Alk as CaCO3	D	114				
1720258-01	ISM2510Bw EC	A	115				
1720258-02	ISM2510Bw EC	A	116				
1720258-03	ISM2510Bw EC	A	117				
1720259-01	i120.1w EC	A	118				
1720267-01	i310.1w Tot Alk as CaCO3	D	119				
1720313-07	i310.1w Tot Alk as CaCO3	H	120				
B[G2107-BS3	QC		121				



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1713473

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Calibration ID:

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Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713473-ICV1	QC		1		7B07020		
B[G2116-BS1	QC		2				
B[G2116-BS2	QC		3				
B[G2116-BS3	QC		4				
B[G2116-BLK1	QC		5				
1720313-08	i150.1w pH	H	6				BatchQC
1720313-08	i310.1w Tot Alk as CaCO3	H	6				
1720313-08	iSM2320Bw CO3	H	6				BatchQC
1720313-08	iSM2320Bw HCO3	H	6				BatchQC
1720313-08	iSM2320Bw OH	H	6				BatchQC
1720313-08	ISM2510Bw EC	H	6				BatchQC
B[G2116-DUP1	QC		7				
1720313-09	i310.1w Tot Alk as CaCO3	G	8				
1720331-01	i150.1w pH	N	9				
1720331-01	iSM2320Bw CO3	N	9				
1720331-01	iSM2320Bw HCO3	N	9				
1720331-01	iSM2320Bw OH	N	9				
1720331-02	i150.1w pH	N	10				
1720331-02	iSM2320Bw CO3	N	10				
1720331-02	iSM2320Bw HCO3	N	10				
1720331-02	iSM2320Bw OH	N	10				
1720332-01	i150.1w pH	N	11				
1720332-01	iSM2320Bw CO3	N	11				
1720332-01	iSM2320Bw HCO3	N	11				
1720332-01	iSM2320Bw OH	N	11				
1720332-02	i150.1w pH	N	12				
1720332-02	iSM2320Bw CO3	N	12				
1720332-02	iSM2320Bw HCO3	N	12				
1720332-02	iSM2320Bw OH	N	12				
1720332-03	i150.1w pH	N	13				
1720332-03	iSM2320Bw CO3	N	13				
1720332-03	iSM2320Bw HCO3	N	13				
1720332-03	iSM2320Bw OH	N	13				
1720361-01	i150.1w pH	C	14				
1720361-01	iSM2320Bw CO3	C	14				
1720361-01	iSM2320Bw HCO3	C	14				
1720361-01	iSM2320Bw OH	C	14				
1720361-01	ISM2510Bw EC	C	14				
1720405-03	i310.1w Tot Alk as CaCO3	G	15				



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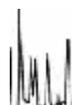
Instrument: MET-1

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Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720405-04	i310.1w Tot Alk as CaCO3	G	16				
B[G2117-BS1	QC		17				
B[G2117-BS2	QC		18				
B[G2117-BS3	QC		19				
B[G2117-BLK1	QC		20				
1720405-06	i120.1w EC	G	21				BatchQC
1720405-06	i310.1w Tot Alk as CaCO3	G	21				
B[G2117-DUP1	QC		22				
1720405-05	i310.1w Tot Alk as CaCO3	G	23				
1720405-07	i120.1w EC	A	24				
1720405-08	i120.1w EC	A	25				
1720405-09	i120.1w EC	A	26				
1720405-11	i120.1w EC	A	27				
1720405-13	i310.1w Tot Alk as CaCO3	G	28				
1720405-14	i310.1w Tot Alk as CaCO3	G	29				
1720405-15	i310.1w Tot Alk as CaCO3	G	30				
1720405-17	i310.1w Tot Alk as CaCO3	G	31				
B[G2118-BS1	QC		32				
B[G2118-BS2	QC		33				
B[G2118-BS3	QC		34				
B[G2118-BLK1	QC		35				
1720444-01	i120.1w EC	D	36				
1720444-01	i150.1w pH	D	36				
1720444-01	i310.1w CO3	D	36				
1720444-01	i310.1w HCO3	D	36				
1720444-01	i310.1w OH	D	36				
1720444-01	ISM2510Bw EC	D	36				BatchQC
B[G2118-DUP1	QC		37				
1720406-01	i120.1w EC	B	38				
1720406-01	i150.1w pH	B	38				
1720408-01	i120.1w EC	A	39				
1720411-01	ISM2510Bw EC	A	40				
1720415-01	i120.1w EC	D	41				
1720415-01	i150.1w pH	D	41				
1720448-01	i120.1w EC	A	42				
1720448-02	i120.1w EC	A	43				
1720455-01	i120.1w EC	A	44				
1720481-01	i120.1w EC	A	45				
1720481-01	i150.1w pH	A	45				



ANALYSIS SEQUENCE

1713473

Instrument: MET-1

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720483-01	i120.1w EC	D	46				
1720483-01	i150.1w pH	D	46				
1720483-01	i310.1w CO3	D	46				
1720483-01	i310.1w HCO3	D	46				
1720483-01	i310.1w OH	D	46				
B[G2119-BS1	QC		47				
B[G2119-BS2	QC		48				
B[G2119-BS3	QC		49				
B[G2119-BLK1	QC		50				
1720498-01	i150.1w pH	A	51				
1720498-01	iSM2320Bw CO3	A	51				
1720498-01	iSM2320Bw CO3 Alk as CaCO3	A	51				BatchQC
1720498-01	iSM2320Bw HCO3	A	51				
1720498-01	iSM2320Bw HCO3 Alk as CaCC	A	51				BatchQC
1720498-01	iSM2320Bw OH	A	51				
1720498-01	iSM2320Bw OH Alk as CaCO3	A	51				BatchQC
1720498-01	iSM2320Bw Tot Alk as CaCO3	A	51				BatchQC
1720498-01	ISM2510Bw EC	A	51				
B[G2119-DUP1	QC		52				
1720488-01	i150.1w pH	I	53				
1720488-01	iSM2320Bw CO3 Alk as CaCO3	I	53				
1720488-01	iSM2320Bw HCO3 Alk as CaCC	I	53				
1720488-01	iSM2320Bw OH Alk as CaCO3	I	53				
1720488-01	iSM2320Bw Tot Alk as CaCO3	I	53				
1720495-01	i150.1w pH	A	54				
1720495-01	iSM2320Bw CO3	A	54				
1720495-01	iSM2320Bw HCO3	A	54				
1720495-01	iSM2320Bw OH	A	54				
1720495-01	ISM2510Bw EC	A	54				
1720496-01	i150.1w pH	A	55				
1720496-01	iSM2320Bw CO3	A	55				
1720496-01	iSM2320Bw HCO3	A	55				
1720496-01	iSM2320Bw OH	A	55				
1720496-01	ISM2510Bw EC	A	55				
1720497-01	i150.1w pH	A	56				
1720497-01	iSM2320Bw CO3	A	56				
1720497-01	iSM2320Bw HCO3	A	56				
1720497-01	iSM2320Bw OH	A	56				
1720497-01	ISM2510Bw EC	A	56				



ANALYSIS SEQUENCE

1713473

Instrument: MET-1

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720505-01	iSM2320Bw CO3 Alk as CaCO3	D	57				
1720505-01	iSM2320Bw HCO3 Alk as CaCC	D	57				
1720505-01	iSM2320Bw OH Alk as CaCO3	D	57				
1720505-01	ISM2510Bw EC	D	57				
1720505-02	iSM2320Bw CO3 Alk as CaCO3	D	58				
1720505-02	iSM2320Bw HCO3 Alk as CaCC	D	58				
1720505-02	iSM2320Bw OH Alk as CaCO3	D	58				
1720505-02	ISM2510Bw EC	D	58				
1720505-03	iSM2320Bw CO3 Alk as CaCO3	D	59				
1720505-03	iSM2320Bw HCO3 Alk as CaCC	D	59				
1720505-03	iSM2320Bw OH Alk as CaCO3	D	59				
1720505-03	ISM2510Bw EC	D	59				
1720505-04	iSM2320Bw CO3 Alk as CaCO3	D	60				
1720505-04	iSM2320Bw HCO3 Alk as CaCC	D	60				
1720505-04	iSM2320Bw OH Alk as CaCO3	D	60				
1720505-04	ISM2510Bw EC	D	60				
1720505-05	iSM2320Bw CO3 Alk as CaCO3	D	61				
1720505-05	iSM2320Bw HCO3 Alk as CaCC	D	61				
1720505-05	iSM2320Bw OH Alk as CaCO3	D	61				
1720505-05	ISM2510Bw EC	D	61				
B[G2120-BS1	QC		62				
B[G2120-BS2	QC		63				
B[G2120-BS3	QC		64				
B[G2120-BLK1	QC		65				
1720550-05	i120.1w EC	H	66				BatchQC
1720550-05	i150.1w pH	H	66				
1720550-05	iSM2320Bw CO3	H	66				
1720550-05	iSM2320Bw HCO3	H	66				
1720550-05	iSM2320Bw OH	H	66				
1720550-05	ISM2510Bw EC	H	66				
B[G2120-DUP1	QC		67				
1720617-01	i150.1w pH	A	68				
1720617-01	iSM2320Bw CO3	A	68				
1720617-01	iSM2320Bw HCO3	A	68				
1720617-01	iSM2320Bw OH	A	68				
1720617-01	ISM2510Bw EC	A	68				
1720632-01	i120.1w EC	A	69				



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20405
Class: WET
Method: EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE
EPA-353.2

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Client Sample Id:

Lab Sample Id:

27EW-02_170725
27EW-04_170725
27EW-08_170725
27EW-14_170725
27EW-18_170725
27EW-13_170725
27EW-16_170725
27EW-17_170725
27MW14_170725

1720405-01
1720405-03
1720405-04
1720405-05
1720405-06
1720405-13
1720405-14
1720405-15
1720405-17

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: Sara Guron

Date: 08-25-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS

EPA-353.2

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: KONE-1

Analyte	DL	LOD	LOQ	Units
Nitrite as N	0.01	0.03	0.05	mg/L
Nitrite as NO2	0.04	0.1	0.17	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27EW-02_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-01

File ID: 170726 0834 NO2-031

Sampled: 07/25/17 09:40

Prepared: 07/26/17 08:34

Analyzed: 07/26/17 08:50

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2347

Sequence:

1713412

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27EW-04_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-03

File ID: 170726 0834 NO2-037

Sampled: 07/25/17 11:10

Prepared: 07/26/17 08:34

Analyzed: 07/26/17 09:15

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2347

Sequence:

1713412

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.032	0.010	0.030	0.050	1	J	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27EW-08_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-04

File ID: 170726 0834 NO2-038

Sampled: 07/25/17 11:15

Prepared: 07/26/17 08:34

Analyzed: 07/26/17 09:15

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2347

Sequence:

1713412

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27EW-14_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-05

File ID: 170726 0834 NO2-039

Sampled: 07/25/17 11:40

Prepared: 07/26/17 08:34

Analyzed: 07/26/17 09:15

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2347

Sequence:

1713412

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27EW-18_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-06

File ID: 170726 0834 NO2-040

Sampled: 07/25/17 09:35

Prepared: 07/26/17 08:34

Analyzed: 07/26/17 09:15

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2347

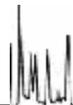
Sequence:

1713412

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27EW-13_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-13

File ID: 170726 0834 NO2-041

Sampled: 07/25/17 12:50

Prepared: 07/26/17 08:34

Analyzed: 07/26/17 09:15

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2347

Sequence:

1713412

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27EW-16_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-14

File ID: 170726 0834 NO2-042

Sampled: 07/25/17 11:50

Prepared: 07/26/17 08:34

Analyzed: 07/26/17 09:15

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2347

Sequence:

1713412

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27EW-17_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-15

File ID: 170726 0834 NO2-043

Sampled: 07/25/17 12:35

Prepared: 07/26/17 08:34

Analyzed: 07/26/17 09:15

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2347

Sequence:

1713412

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.043	0.010	0.030	0.050	1	J	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27MW14_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-17

File ID: 170726 0834 NO2-044

Sampled: 07/25/17 12:55

Prepared: 07/26/17 08:34

Analyzed: 07/26/17 09:15

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: BIG2347

Sequence:

1713412

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-353.2

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water Laboratory ID: BIG2347-BLK1 File ID: 170726 0834 NO2-021
 Prepared: 07/26/17 08:34 Preparation: No Prep Initial/Final: 20 ml / 20 ml
 Analyzed: 07/26/17 08:39 Instrument: KONE-1
 Batch: BIG2347 Sequence: 1713412 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES
EPA-353.2

27EW-02 170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2347-DUP1

Batch: B[G2347

Lab Source ID: 1720405-01

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Source Sample Name: 27EW-02 170725

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Nitrite as N	10	0.0020910		ND				EPA-353.2
Nitrite as NO2	10	0.0068679		ND				EPA-353.2

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
EPA-353.2

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Matrix: Water
Batch: B[G2347 Laboratory ID: B[G2347-BS1
Preparation: No Prep Initial/Final: 20 ml / 20 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Nitrite as N	0.50000	0.50869	102	90 - 110
Nitrite as NO2	1.6425	1.6708	102	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-353.2

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713412</u>	Instrument:	<u>KONE-1</u>
Matrix:	<u>Water</u>	Calibration:	<u>UNASSIGNED</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	1713412-CCV7	170726 0834 NO2-045	07/26/17 09:16
Calibration Blank	1713412-CCB7	170726 0834 NO2-046	07/26/17 09:16
Calibration Check	1713412-CCV8	170726 0834 NO2-047	07/26/17 10:05
Calibration Blank	1713412-CCB8	170726 0834 NO2-048	07/26/17 10:05
Calibration Check	1713412-CCV9	170726 0834 NO2-059	07/26/17 10:07
Calibration Blank	1713412-CCB9	170726 0834 NO2-060	07/26/17 10:07
Calibration Check	1713412-CCVA	170726 0834 NO2-063	07/26/17 10:09
Calibration Blank	1713412-CCBA	170726 0834 NO2-064	07/26/17 10:09
Calibration Check	1713412-CCVB	170726 2112 NO2-001	07/26/17 21:12
Calibration Blank	1713412-CCBB	170726 2112 NO2-002	07/26/17 21:12
Calibration Check	1713412-CCVC	170726 2112 NO2-004	07/26/17 21:14
Calibration Blank	1713412-CCBC	170726 2112 NO2-005	07/26/17 21:14
Calibration Check	1713412-CCVD	170726 2112 NO2-006	07/26/17 21:44
Calibration Blank	1713412-CCBD	170726 2112 NO2-007	07/26/17 21:44
Calibration Check	1713412-CCVE	170726 2112 NO2-009	07/26/17 21:45
Calibration Blank	1713412-CCBE	170726 2112 NO2-010	07/26/17 21:45



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**BLANKS
EPA-353.2**

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Instrument ID: KONE-1

Project: Alameda

Sequence: 1713412

Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	DL	LOD	LOQ	Units	C	Method
1713412-CCB1	Nitrite as N	0.0034250	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.011249	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCB2	Nitrite as N	0.0011950	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.0039250	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCB3	Nitrite as N	0.0028790	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.0094561	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCB4	Nitrite as N	0.0038440	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.012626	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCB5	Nitrite as N	0.0031770	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.010435	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCB6	Nitrite as N	0.0063000	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.020692	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCB7	Nitrite as N	0.0046700	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.015339	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCB8	Nitrite as N	0.0040340	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.013250	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCB9	Nitrite as N	0.0039290	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.012905	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCBA	Nitrite as N	0.0038120	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.012521	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCBB	Nitrite as N	0.0071360	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.023438	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCBC	Nitrite as N	0.0070640	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.023202	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCBD	Nitrite as N	0.0084730	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.027830	0.040		0.17	mg/L	U	EPA-353.2
1713412-CCBE	Nitrite as N	0.0080710	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.026509	0.040		0.17	mg/L	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL AND CONTINUING CALIBRATION CHECK
EPA-353.2

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Instrument ID: KONE-1

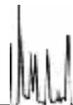
Calibration: UNASSIGNED

Control Limit: +/- 10.00%

Sequence: 1713412

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713412-CCV1	Nitrite as N	0.50000	0.51155	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6802	102	mg/L	EPA-353.2
1713412-CCV2	Nitrite as N	0.50000	0.51209	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6820	102	mg/L	EPA-353.2
1713412-CCV3	Nitrite as N	0.50000	0.50764	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6674	102	mg/L	EPA-353.2
1713412-CCV4	Nitrite as N	0.50000	0.51133	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6795	102	mg/L	EPA-353.2
1713412-CCV5	Nitrite as N	0.50000	0.51276	103	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6842	103	mg/L	EPA-353.2
1713412-CCV6	Nitrite as N	0.50000	0.51706	103	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6983	103	mg/L	EPA-353.2
1713412-CCV7	Nitrite as N	0.50000	0.51208	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6819	102	mg/L	EPA-353.2
1713412-CCV8	Nitrite as N	0.50000	0.51952	104	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.7064	104	mg/L	EPA-353.2
1713412-CCV9	Nitrite as N	0.50000	0.51493	103	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6913	103	mg/L	EPA-353.2
1713412-CCVA	Nitrite as N	0.50000	0.51307	103	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6852	103	mg/L	EPA-353.2
1713412-CCVB	Nitrite as N	0.50000	0.50818	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6691	102	mg/L	EPA-353.2
1713412-CCVC	Nitrite as N	0.50000	0.50572	101	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6610	101	mg/L	EPA-353.2
1713412-CCVD	Nitrite as N	0.50000	0.50862	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6706	102	mg/L	EPA-353.2
1713412-CCVE	Nitrite as N	0.50000	0.50970	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6741	102	mg/L	EPA-353.2

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

HOLDING TIME SUMMARY
EPA-353.2

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
27EW-02_170725	07/25/17 09:40	07/25/17 22:20	07/26/17 08:34	0.97	2.00	07/26/17 08:50	0.97	2.00	
27EW-04_170725	07/25/17 11:10	07/25/17 22:20	07/26/17 08:34	0.92	2.00	07/26/17 09:15	0.92	2.00	
27EW-08_170725	07/25/17 11:15	07/25/17 22:20	07/26/17 08:34	0.92	2.00	07/26/17 09:15	0.92	2.00	
27EW-14_170725	07/25/17 11:40	07/25/17 22:20	07/26/17 08:34	0.90	2.00	07/26/17 09:15	0.90	2.00	
27EW-18_170725	07/25/17 09:35	07/25/17 22:20	07/26/17 08:34	0.99	2.00	07/26/17 09:15	0.99	2.00	
27EW-13_170725	07/25/17 12:50	07/25/17 22:20	07/26/17 08:34	0.85	2.00	07/26/17 09:15	0.85	2.00	
27EW-16_170725	07/25/17 11:50	07/25/17 22:20	07/26/17 08:34	0.89	2.00	07/26/17 09:15	0.89	2.00	
27EW-17_170725	07/25/17 12:35	07/25/17 22:20	07/26/17 08:34	0.86	2.00	07/26/17 09:15	0.86	2.00	
27MW14_170725	07/25/17 12:55	07/25/17 22:20	07/26/17 08:34	0.85	2.00	07/26/17 09:15	0.85	2.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument KONE-1



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Analytical Runs

Laboratory
Analyzer User

26.07.2017 14:54

Test: NO2

Sample Id	Result	Dil. 1 +	Response	Errors
CCV-NO2	0.51155	0.0	0.268	
CCB-NO2	0.00343	0.0	0.006	
B1N-BS1	0.51480	0.0	0.270	
B1N-BLK1	0.00387	0.0	0.007	
1720343-01	0.00549	0.0	0.007	
B1N-DUP1	0.00443	0.0	0.007	
B1N-MS1	0.51179	0.0	0.268	
B1N-MSD1	0.51449	0.0	0.269	
1720312-01	0.03802	0.0	0.024	
1720315-01	0.00499	0.0	0.007	
1720337-01	0.00426	0.0	0.007	
1720337-02	0.00681	0.0	0.008	
CCV-NO2	0.51209	0.0	0.268	
CCB-NO2	0.00120	0.0	0.005	
1720352-01	0.00566	0.0	0.008	
1720353-01	0.00391	0.0	0.007	
1720355-01	0.00626	0.0	0.008	
1720361-01	0.16523	0.0	0.090	
1720406-01	0.00091	0.0	0.005	
B2N-BS1	0.50869	0.0	0.266	
B2N-BLK1	0.00460	0.0	0.007	
1720405-01	0.00286	0.0	0.006	
B2N-DUP1	0.00134	0.0	0.005	
B2N-MS1	0.50871	0.0	0.267	
CCV-NO2	0.50764	0.0	0.266	
CCB-NO2	0.00288	0.0	0.006	
B2N-MSD1	0.50877	0.0	0.267	
CCV-NO2	0.51133	0.0	0.268	
CCB-NO2	0.00384	0.0	0.007	
1720361-01	0.16403	0.0	0.089	
1720361-01	0.16476	0.0	0.089	
1720405-01	0.00209	0.0	0.006	
B2N-DUP1	0.00187	0.0	0.006	
CCV-NO2	0.51276	0.0	0.269	
CCB-NO2	0.00318	0.0	0.006	
CCV-NO2	0.51706	0.0	0.271	
CCB-NO2	0.00630	0.0	0.008	
1720405-03	0.03181	0.0	0.021	
1720405-04	0.00856	0.0	0.009	
1720405-05	0.00739	0.0	0.008	
1720405-06	0.00736	0.0	0.008	
1720405-13	0.00759	0.0	0.009	
1720405-14	0.00903	0.0	0.009	
1720405-15	0.04305	0.0	0.027	
1720405-17	0.00694	0.0	0.008	
CCV-NO2	0.51208	0.0	0.268	
CCB-NO2	0.00467	0.0	0.007	
CCV-NO2	0.51952	0.0	0.272	
CCB-NO2	0.00403	0.0	0.007	
B3N-BS1	0.51244	0.0	0.268	
B3N-BLK1	0.00497	0.0	0.007	
1720400-01	0.00511	0.0	0.007	
B3N-DUP1	0.00633	0.0	0.008	
B3N-MS1	0.52091	0.0	0.273	
B3N-MSD1	0.51972	0.0	0.272	
1720400-03	0.00574	0.0	0.008	
1720400-05	0.00499	0.0	0.007	
1720400-07	0.00576	0.0	0.008	

Laboratory
Analyzer User

26.07.2017 14:54

Test: NO2

Sample Id	Result	Dil. 1 +	Response	Errors
1720400-09	0.00490	0.0	0.007	
CCV-NO2	0.51493	0.0	0.270	
CCB-NO2	0.00393	0.0	0.007	
1720400-11	0.01342	0.0	0.012	
1720400-13	0.00433	0.0	0.007	
CCV-NO2	0.51307	0.0	0.269	
CCB-NO2	0.00381	0.0	0.007	

N 45
Mean 0.11976
SD 0.203015
CV% 169.52

Laboratory
Analyzer User

Date : 26.07.2017

Time : 14:55

Test : NO2
Unit : mg/l

Sample	Result	Date and Time	Note	Dilut
CCV-NO2	0.51155	26.07.2017 08:34		
CCB-NO2	0.00343	26.07.2017 08:34		
B1N-BS1	0.51480	26.07.2017 08:34		
B1N-BLK1	0.00387	26.07.2017 08:34		
1720343-01	0.00549	26.07.2017 08:34		
B1N-DUP1	0.00443	26.07.2017 08:34		
B1N-MS1	0.51179	26.07.2017 08:34		
B1N-MSD1	0.51449	26.07.2017 08:34		
1720312-01	0.03802	26.07.2017 08:34		
1720315-01	0.00499	26.07.2017 08:34		
1720337-01	0.00426	26.07.2017 08:34		
1720337-02	0.00681	26.07.2017 08:34		
CCV-NO2	0.51209	26.07.2017 08:39		
CCB-NO2	0.00120	26.07.2017 08:39		
1720352-01	0.00566	26.07.2017 08:39		
1720353-01	0.00391	26.07.2017 08:39		
1720355-01	0.00626	26.07.2017 08:39		
1720361-01	0.16523	26.07.2017 08:39		
1720406-01	0.00091	26.07.2017 08:39		
B2N-BS1	0.50869	26.07.2017 08:39		
B2N-BLK1	0.00460	26.07.2017 08:39		
1720405-01	0.00286	26.07.2017 08:39		
B2N-DUP1	0.00134	26.07.2017 08:39		
B2N-MS1	0.50871	26.07.2017 08:39		
CCV-NO2	0.50764	26.07.2017 08:41		
CCB-NO2	0.00288	26.07.2017 08:41		
B2N-MSD1	0.50877	26.07.2017 08:41		
CCV-NO2	0.51133	26.07.2017 08:43		
CCB-NO2	0.00384	26.07.2017 08:43		
1720361-01	0.16403	26.07.2017 08:49		
1720361-01	0.16476	26.07.2017 08:49		
1720405-01	0.00209	26.07.2017 08:50		
B2N-DUP1	0.00187	26.07.2017 08:50		
CCV-NO2	0.51276	26.07.2017 08:52		
CCB-NO2	0.00318	26.07.2017 08:52		
CCV-NO2	0.51706	26.07.2017 09:15		
CCB-NO2	0.00630	26.07.2017 09:15		
1720405-03	0.03181	26.07.2017 09:15		
1720405-04	0.00856	26.07.2017 09:15		
1720405-05	0.00739	26.07.2017 09:15		
1720405-06	0.00736	26.07.2017 09:15		
1720405-13	0.00759	26.07.2017 09:15		
1720405-14	0.00903	26.07.2017 09:15		
1720405-15	0.04305	26.07.2017 09:15		
1720405-17	0.00694	26.07.2017 09:15		
CCV-NO2	0.51208	26.07.2017 09:16		
CCB-NO2	0.00467	26.07.2017 09:16		
CCV-NO2	0.51952	26.07.2017 10:05		
CCB-NO2	0.00403	26.07.2017 10:05		
B3N-BS1	0.51244	26.07.2017 10:05		
B3N-BLK1	0.00497	26.07.2017 10:05		
1720400-01	0.00511	26.07.2017 10:05		
B3N-DUP1	0.00633	26.07.2017 10:05		
B3N-MS1	0.52091	26.07.2017 10:05		
B3N-MSD1	0.51972	26.07.2017 10:05		
1720400-03	0.00574	26.07.2017 10:05		

Laboratory
Analyzer User

Date : 26.07.2017
Time : 14:55

Test : NO2
Unit : mg/l

Sample	Result	Date and Time	Note	Dilut
1720400-05	0.00499	26.07.2017 10:05		
1720400-07	0.00576	26.07.2017 10:05		
1720400-09	0.00490	26.07.2017 10:05		
CCV-NO2	0.51493	26.07.2017 10:07		
CCB-NO2	0.00393	26.07.2017 10:07		
1720400-11	0.01342	26.07.2017 10:07		
1720400-13	0.00433	26.07.2017 10:07		
CCV-NO2	0.51307	26.07.2017 10:09		
CCB-NO2	0.00381	26.07.2017 10:09		

Laboratory
Analyzer User

27.07.2017 07:08

Test: NO2

Sample Id	Result	Dil. 1 +	Response	Errors
CCV-NO2	0.50818	0.0	0.266	
CCB-NO2	0.00714	0.0	0.008	
1720500-01	0.01396	0.0	0.012	
CCV-NO2	0.50572	0.0	0.265	
CCB-NO2	0.00706	0.0	0.008	
CCV-NO2	0.50862	0.0	0.266	
CCB-NO2	0.00847	0.0	0.009	
1720500-01	0.01497	0.0	0.012	
CCV-NO2	0.50970	0.0	0.267	
CCB-NO2	0.00807	0.0	0.009	

N 2
Mean 0.01446
SD 0.000712
CV% 4.92

Laboratory
Analyzer User

Date : 27.07.2017
Time : 07:09

Test : NO2
Unit : mg/l

Sample	Result	Date and Time	Note	Dilut
CCV-NO2	0.50818	26.07.2017 21:12		
CCB-NO2	0.00714	26.07.2017 21:12		
1720500-01	0.01396	26.07.2017 21:12		
CCV-NO2	0.50572	26.07.2017 21:14		
CCB-NO2	0.00706	26.07.2017 21:14		
CCV-NO2	0.50862	26.07.2017 21:44		
CCB-NO2	0.00847	26.07.2017 21:44		
1720500-01	0.01497	26.07.2017 21:44		
CCV-NO2	0.50970	26.07.2017 21:45		
CCB-NO2	0.00807	26.07.2017 21:45		



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Calibration Summary

Laboratory
Analyzer User

24.07.2017 10:59

Test NO2

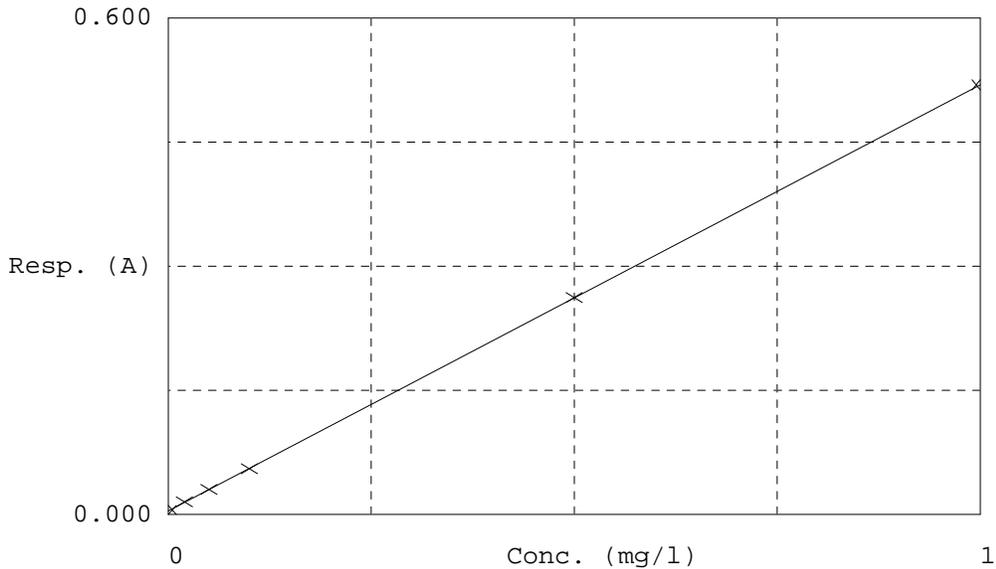
Accepted 24.07.2017 10:59

Factor 1.94242

Bias 0.00461

Coeff. of det. 0.999996

Errors



Calibrator	Response	Calc. con.	Conc.	Errors
1 NO2-0	0.00483	0.00043	0.00000	
2 NO2-0.02	0.01534	0.02083	0.02000	
3 NO2-0.05	0.03026	0.04982	0.05000	
4 NO2-0.10	0.05539	0.09863	0.10000	
5 NO2-0.50	0.26220	0.50035	0.50000	
6 NO2-1.00	0.51941	0.99996	1.00000	
7 ICB-NO2(control)	0.00562	0.00196	0.00000	
8 ICV-NO2(control)	0.26423	0.50428	0.50000	

```

=====
Test definition          Aquakem 7.2AQ1          Page:      1
NO2                    Laboratory
                      Analyzer User
Date :   24.07.2017
Time :   10:59
-----

```

```

Last change date 04.02.2016 12:17
Tick length (sec) 7.0
Full name           Nitrite as N
Online Name
Test type           Photometric
Test In Use         YES
                    LOW      HIGH
Test limit          *        5.00000 mg/l
Initial absorbance -0.050 *      A
Dilution limit     *        1.000000 mg/l
Secondary dil 1+   0.0      4.0
Critical limit      *        *      mg/l
Reflex test limit  *        *      mg/l
Reflex test

```

```

Acceptance          Manual      Reference class  LOW      HIGH      In Use
Dilution 1+        0.0

```

```

Sample type         Water      Correction factor 1.00
                   Raw water  Correction bias   0.00      mg/l
                   Sewage

```

```

Calibration type    Linear
Curve direction     Ascending
Repeat time (d)     0          Abs error (mA)   *
Points/cal.         Single      Rel error (%)     *
Acceptance          Manual
Response limit (mA) MIN      MAX
                   *          *

```

```

Bias correction in use NO
Cd reduction        NO

```

```

Type of Calibrators Separate
Calibrator          Conc.      Dil. ratio
NO2-0                0.000     1+0.0
NO2-0.02             0.020     1+0.0
NO2-0.05             0.050     1+0.0
NO2-0.10             0.100     1+0.0
NO2-0.50             0.500     1+0.0
NO2-1.00             1.000     1+0.0

```

```

Manual QC in Use    YES      Routine QC in Use  YES
Acceptance          Manual    Interval           Requests 10
                   Additional condition NO

```

```

Control    Mean    SD      Control    Mean    SD
ICB-NO2    0.00  0.01    CCB-NO2    0.00    0.01
ICV-NO2    0.50  0.05    CCV-NO2    0.50    0.05

```

```

Rules in Use        1:1.0*SD      Rules in Use        1:1.0*SD

```

```

Blank              YES
                  Normal cuvette

```

```

Sample            Volume (ul)      32
Disp. with        Extra           Add. Volume (ul) 30
Dilution with    Water          Wash reagent      None

```

NO2

Laboratory
Analyzer User

Date : 24.07.2017

Time : 10:59

Reagent	NO2 Buffer	Volume (ul)	120
Disp. with	Extra	Add. Volume (ul)	30
Wash reagent	None		
Syringe speed	Normal		
Measurement	End point	Blank	
Resp. Min(A)	*	Resp. Max(A)	*
Reagent	NO2 color	Volume (ul)	32
Disp. with	Extra	Add. Volume (ul)	30
Wash reagent	None		
Syringe speed	Normal		
Incubation		Time (sec)	360
Measurement	End point		
Wavelength (nm)	540 nm	Side wavel. (nm)	None
Meas. type	Fixed timing		



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2347

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720405-01 G	i353.2wm NO2 as N	7/26/2017 8:34AM	RCC	20	20					
1720405-03 G	i353.2wm NO2 as N	7/26/2017 8:34AM	RCC	20	20					
1720405-04 G	i353.2wm NO2 as N	7/26/2017 8:34AM	RCC	20	20					
1720405-05 G	i353.2wm NO2 as N	7/26/2017 8:34AM	RCC	20	20					
1720405-06 G	i353.2wm NO2 as N	7/26/2017 8:34AM	RCC	20	20					
1720405-13 G	i353.2wm NO2 as N	7/26/2017 8:34AM	RCC	20	20					
1720405-14 G	i353.2wm NO2 as N	7/26/2017 8:34AM	RCC	20	20					
1720405-15 G	i353.2wm NO2 as N	7/26/2017 8:34AM	RCC	20	20					
1720405-17 G	i353.2wm NO2 as N	7/26/2017 8:34AM	RCC	20	20					
B[G2347-BLK1	QC	7/26/2017 8:34AM	RCC	20	20					
B[G2347-BS1	QC	7/26/2017 8:34AM	RCC	20	20	7F23021		1000		
B[G2347-DUP1	QC	7/26/2017 8:34AM	RCC	20	20		1720405-01			
B[G2347-MS1	QC	7/26/2017 8:34AM	RCC	19	20	7F23021	1720405-01	1000		
B[G2347-MSD1	QC	7/26/2017 8:34AM	RCC	19	20	7F23021	1720405-01	1000		

Spike Mixes	Description	Solvent	Prepared	Expires
7F23021	PO4/NO2 SPIKE	DI WATER	6/23/2017 by Roxanne Cantorn	12/23/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713412

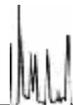
Instrument: KONE-1

Calibration ID:

Sequence Date: 07/26/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713412-CCV1	QC		1		7G25034		
1713412-CCB1	QC		2				
B[G2346-BS1	QC		3				
B[G2346-BLK1	QC		4				
1720343-01	i353.2wb NO2 as NO2	D	5				BatchQC
1720343-01	i353.2wm NO2 as N	D	5				
B[G2346-DUP1	QC		6				
B[G2346-MS1	QC		7				
B[G2346-MSD1	QC		8				
1720312-01	i353.2wm NO2 as N	A	9				
1720337-01	i353.2wm NO2 as N	A	10				
1720337-02	i353.2wm NO2 as N	G	11				
1713412-CCV2	QC		12		7G25034		
1713412-CCB2	QC		13				
1720352-01	i353.2wb NO2 as NO2	I	14				
1720353-01	i353.2wb NO2 as NO2	I	15				
1720355-01	i353.2wb NO2 as NO2	I	16				
1720361-01	i353.2wm NO2 as N	C	17				
1720406-01	i353.2wm NO2 as N	B	18				
B[G2347-BS1	QC		19				
B[G2347-BLK1	QC		20				
B[G2347-MS1	QC		21				
1713412-CCV3	QC		22		7G25034		
1713412-CCB3	QC		23				
B[G2347-MSD1	QC		24				
1713412-CCV4	QC		25		7G25034		
1713412-CCB4	QC		26				
1720405-01	i353.2wm NO2 as N	G	27				
B[G2347-DUP1	QC		28				
1713412-CCV5	QC		29		7G25034		
1713412-CCB5	QC		30				
1713412-CCV6	QC		31		7G25034		
1713412-CCB6	QC		32				
1720405-03	i353.2wm NO2 as N	G	33				
1720405-04	i353.2wm NO2 as N	G	34				
1720405-05	i353.2wm NO2 as N	G	35				
1720405-06	i353.2wm NO2 as N	G	36				
1720405-13	i353.2wm NO2 as N	G	37				
1720405-14	i353.2wm NO2 as N	G	38				



ANALYSIS SEQUENCE

1713412

Instrument: KONE-1

Calibration ID:

Sequence Date: 07/26/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720405-15	i353.2wm NO2 as N	G	39				
1720405-17	i353.2wm NO2 as N	G	40				
1713412-CCV7	QC		41		7G25034		
1713412-CCB7	QC		42				
1713412-CCV8	QC		43		7G25034		
1713412-CCB8	QC		44				
B[G2348-BS1	QC		45				
B[G2348-BLK1	QC		46				
1720400-01	i353.2wm NO2 as N	D	47				BatchQC
1720400-01	i353.2wm NO2 as N PQL=0.5	D	47				**
B[G2348-DUP1	QC		48				
B[G2348-MS1	QC		49				
B[G2348-MSD1	QC		50				
1720400-03	i353.2wm NO2 as N PQL=0.5	D	51				**
1720400-05	i353.2wm NO2 as N PQL=0.5	D	52				**
1720400-07	i353.2wm NO2 as N PQL=0.5	D	53				**
1720400-09	i353.2wm NO2 as N PQL=0.5	D	54				**
1713412-CCV9	QC		55		7G25034		
1713412-CCB9	QC		56				
1720400-11	i353.2wm NO2 as N PQL=0.5	D	57				**
1720400-13	i353.2wm NO2 as N PQL=0.5	D	58				**
1713412-CCVA	QC		59		7G25034		
1713412-CCBA	QC		60				
1713412-CCVB	QC		61		7G25034		
1713412-CCBB	QC		62				
1720500-01	i353.2wm NO2 as N	D	63				
1713412-CCVC	QC		64		7G25034		
1713412-CCBC	QC		65				
1713412-CCVD	QC		66		7G25034		
1713412-CCBD	QC		67				
1713412-CCVE	QC		68		7G25034		
1713412-CCBE	QC		69				



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Environmental Testing Laboratory Since 1949



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20405
Class: WET
Method: EPA-415.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE
EPA-415.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Client Sample Id:

Lab Sample Id:

27EW-02_170725
27EW-04_170725
27EW-08_170725
27EW-14_170725
27EW-18_170725
27EW-13_170725
27EW-16_170725
27EW-17_170725
27MW14_170725

1720405-01
1720405-03
1720405-04
1720405-05
1720405-06
1720405-13
1720405-14
1720405-15
1720405-17

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: Sara Guron

Date: 08-25-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS

EPA-415.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: TOC2

Analyte	DL	LOD	LOQ	Units
Non-Volatile Organic Carbon	0.3	0.3	1	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-415.1

27EW-02_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-01

File ID: 20170731_0905-021

Sampled: 07/25/17 09:40

Prepared: 07/28/17 06:50

Analyzed: 07/31/17 13:56

Solids: 0.00

Preparation: General Preparation

Initial/Final: 100 ml / 100 ml

Batch: BIG2148

Sequence:

1713540

Calibration: UNASSIGNED

Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	4.5	0.30	0.30	1.0	1		EPA-415.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-415.1

27EW-08_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-04

File ID: 20170731_0905-027

Sampled: 07/25/17 11:15

Prepared: 07/28/17 06:50

Analyzed: 07/31/17 15:22

Solids: 0.00

Preparation: General Preparation

Initial/Final: 100 ml / 100 ml

Batch: BIG2148

Sequence:

1713540

Calibration: UNASSIGNED

Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	4.9	0.30	0.30	1.0	1		EPA-415.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-415.1

27EW-14_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-05

File ID: 20170731_0905-028

Sampled: 07/25/17 11:40

Prepared: 07/28/17 06:50

Analyzed: 07/31/17 15:37

Solids: 0.00

Preparation: General Preparation

Initial/Final: 100 ml / 100 ml

Batch: BIG2148

Sequence:

1713540

Calibration: UNASSIGNED

Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	4.7	0.30	0.30	1.0	1		EPA-415.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-415.1

27EW-18_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-06

File ID: 20170731_0905-029

Sampled: 07/25/17 09:35

Prepared: 07/28/17 06:50

Analyzed: 07/31/17 15:51

Solids: 0.00

Preparation: General Preparation

Initial/Final: 100 ml / 100 ml

Batch: BIG2148

Sequence:

1713540

Calibration: UNASSIGNED

Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	2.8	0.30	0.30	1.0	1		EPA-415.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-415.1

27EW-16_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-14

File ID: 20170731_0905-033

Sampled: 07/25/17 11:50

Prepared: 07/28/17 06:50

Analyzed: 07/31/17 16:48

Solids: 0.00

Preparation: General Preparation

Initial/Final: 100 ml / 100 ml

Batch: BIG2148

Sequence:

1713540

Calibration: UNASSIGNED

Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	2.4	0.30	0.30	1.0	1		EPA-415.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-415.1

27EW-17_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-15

File ID: 20170731_0905-034

Sampled: 07/25/17 12:35

Prepared: 07/28/17 06:50

Analyzed: 07/31/17 17:02

Solids: 0.00

Preparation: General Preparation

Initial/Final: 100 ml / 100 ml

Batch: BIG2148

Sequence:

1713540

Calibration: UNASSIGNED

Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	4.0	0.30	0.30	1.0	1		EPA-415.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-415.1

27MW14_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-17

File ID: 20170731_0905-035

Sampled: 07/25/17 12:55

Prepared: 07/28/17 06:50

Analyzed: 07/31/17 17:17

Solids: 0.00

Preparation: General Preparation

Initial/Final: 100 ml / 100 ml

Batch: BIG2148

Sequence:

1713540

Calibration: UNASSIGNED

Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	6.0	0.30	0.30	1.0	1		EPA-415.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY

EPA-415.1

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- SAMCN Project: Alameda
Batch: B[G2148 Batch Matrix: Water Preparation: General Preparation

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
27EW-02_170725	1720405-01	20170731_0905-021	07/28/17 06:50	
27EW-04_170725	1720405-03	20170731_0905-026	07/28/17 06:50	
27EW-08_170725	1720405-04	20170731_0905-027	07/28/17 06:50	
27EW-14_170725	1720405-05	20170731_0905-028	07/28/17 06:50	
27EW-18_170725	1720405-06	20170731_0905-029	07/28/17 06:50	
27EW-13_170725	1720405-13	20170731_0905-032	07/28/17 06:50	
27EW-16_170725	1720405-14	20170731_0905-033	07/28/17 06:50	
27EW-17_170725	1720405-15	20170731_0905-034	07/28/17 06:50	
27MW14_170725	1720405-17	20170731_0905-035	07/28/17 06:50	
Blank	B[G2148-BLK1	20170731_0905-017	07/28/17 06:50	
LCS	B[G2148-BS1	20170731_0905-047	07/28/17 06:50	
27EW-02_170725	B[G2148-DUP1	20170731_0905-023	07/28/17 06:50	
27EW-02_170725	B[G2148-MS1	20170731_0905-024	07/28/17 06:50	
27EW-02_170725	B[G2148-MSD1	20170731_0905-025	07/28/17 06:50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET
EPA-415.1

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>BIG2148-BLK1</u>
		File ID:	<u>20170731 0905-017</u>
Prepared:	<u>07/28/17 06:50</u>	Preparation:	<u>General Preparation</u>
		Initial/Final:	<u>100 ml / 100 ml</u>
Analyzed:	<u>07/31/17 12:58</u>	Instrument:	<u>TOC2</u>
Batch:	<u>BIG2148</u>	Sequence:	<u>1713540</u>
		Calibration:	<u>UNASSIGNED</u>

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
---	Non-Volatile Organic Carbon	0.30	0.30	0.30	1.0	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES

27EW-02 170725

EPA-415.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2148-DUP1

Batch: B[G2148

Lab Source ID: 1720405-01

Preparation: General Preparation

Initial/Final: 100 ml / 100 ml

Source Sample Name: 27EW-02 170725

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Non-Volatile Organic Carbon	10	4.4980		4.5340		0.797		EPA-415.1

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-415.1

27EW-02 170725

Laboratory: BC Laboratories SDG: 17-20405
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water
 Batch: BIG2148 Laboratory ID: BIG2148-MS1
 Preparation: General Preparation Initial/Final: 99.5 ml / 100 ml
 Source Sample Number: 1720405-01

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Non-Volatile Organic Carbon	5.0251	4.4980	9.8332	106	80 - 120

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Non-Volatile Organic Carbon	5.0251	9.7729	105	0.615	10	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-415.1

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713540</u>	Instrument:	<u>TOC2</u>
Matrix:	<u>Water</u>	Calibration:	<u>UNASSIGNED</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713540-ICV1	20170728_0800-003	07/28/17 09:01
Initial Cal Blank	1713540-ICB1	20170728_0800-004	07/28/17 09:15
MRL Check	1713540-CRL1	20170728_0800-005	07/28/17 09:30
Calibration Check	1713540-CCV1	20170728_0800-015	07/28/17 11:53
Calibration Blank	1713540-CCB1	20170728_0800-016	07/28/17 12:07
Calibration Check	1713540-CCV2	20170728_0800-023	07/28/17 13:47
Calibration Blank	1713540-CCB2	20170728_0800-024	07/28/17 14:02
Calibration Check	1713540-CCV3	20170728_0800-035	07/28/17 16:40
Calibration Blank	1713540-CCB3	20170728_0800-036	07/28/17 16:54
Calibration Check	1713540-CCV4	20170728_0800-046	07/28/17 19:18
Calibration Blank	1713540-CCB4	20170728_0800-047	07/28/17 19:32
Calibration Check	1713540-CCV9	20170731_0905-001	07/31/17 09:11
Calibration Blank	1713540-CCB9	20170731_0905-002	07/31/17 09:25
Calibration Check	1713540-CCVA	20170731_0905-008	07/31/17 10:51
Calibration Blank	1713540-CCBA	20170731_0905-009	07/31/17 11:04
Blank	B[G2148-BLK1	20170731_0905-017	07/31/17 12:58
Calibration Check	1713540-CCVB	20170731_0905-018	07/31/17 13:13
Calibration Blank	1713540-CCBB	20170731_0905-019	07/31/17 13:27
27EW-02_170725	1720405-01	20170731_0905-021	07/31/17 13:56
27EW-02_170725	B[G2148-DUP1	20170731_0905-023	07/31/17 14:25
27EW-02_170725	B[G2148-MS1	20170731_0905-024	07/31/17 14:39
27EW-02_170725	B[G2148-MSD1	20170731_0905-025	07/31/17 14:54
27EW-04_170725	1720405-03	20170731_0905-026	07/31/17 15:08
27EW-08_170725	1720405-04	20170731_0905-027	07/31/17 15:22
27EW-14_170725	1720405-05	20170731_0905-028	07/31/17 15:37
27EW-18_170725	1720405-06	20170731_0905-029	07/31/17 15:51



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-415.1

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713540</u>	Instrument:	<u>TOC2</u>
Matrix:	<u>Water</u>	Calibration:	<u>UNASSIGNED</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	1713540-CCVC	20170731_0905-030	07/31/17 16:05
Calibration Blank	1713540-CCBC	20170731_0905-031	07/31/17 16:19
27EW-13_170725	1720405-13	20170731_0905-032	07/31/17 16:34
27EW-16_170725	1720405-14	20170731_0905-033	07/31/17 16:48
27EW-17_170725	1720405-15	20170731_0905-034	07/31/17 17:02
27MW14_170725	1720405-17	20170731_0905-035	07/31/17 17:17
Calibration Check	1713540-CCVD	20170731_0905-036	07/31/17 17:31
Calibration Blank	1713540-CCBD	20170731_0905-037	07/31/17 17:45
LCS	B[G2148-BS1	20170731_0905-047	07/31/17 20:08
Calibration Check	1713540-CCVE	20170731_0905-048	07/31/17 20:23
Calibration Blank	1713540-CCBE	20170731_0905-049	07/31/17 20:37



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**BLANKS
EPA-415.1**

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Instrument ID: TOC2

Project: Alameda

Sequence: 1713540

Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	DL	LOD	LOQ	Units	C	Method
1713540-ICB1	Non-Volatile Organic Carbon	0.0090000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCB1	Non-Volatile Organic Carbon	0.014000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCB2	Non-Volatile Organic Carbon	0.047000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCB3	Non-Volatile Organic Carbon	0.082000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCB4	Non-Volatile Organic Carbon	0.15600	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCB9	Non-Volatile Organic Carbon	0.0020000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCBA	Non-Volatile Organic Carbon	0.0000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCBB	Non-Volatile Organic Carbon	0.0090000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCBC	Non-Volatile Organic Carbon	0.060000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCBD	Non-Volatile Organic Carbon	0.0090000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCBE	Non-Volatile Organic Carbon	0.030000	0.30		1.0	mg/L	U	EPA-415.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-415.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Instrument ID: TOC2

Calibration: UNASSIGNED

Control Limit: +/- 10.00%

Sequence: 1713540

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713540-ICV1	Non-Volatile Organic Carbon	5.0000	5.4040	108	mg/L	EPA-415.1
1713540-CCV1	Non-Volatile Organic Carbon	5.0000	5.3290	107	mg/L	EPA-415.1
1713540-CCV2	Non-Volatile Organic Carbon	5.0000	5.3650	107	mg/L	EPA-415.1
1713540-CCV3	Non-Volatile Organic Carbon	5.0000	5.3770	108	mg/L	EPA-415.1
1713540-CCV4	Non-Volatile Organic Carbon	5.0000	5.3540	107	mg/L	EPA-415.1
1713540-CCV9	Non-Volatile Organic Carbon	5.0000	5.2760	106	mg/L	EPA-415.1
1713540-CCVA	Non-Volatile Organic Carbon	5.0000	5.2620	105	mg/L	EPA-415.1
1713540-CCVB	Non-Volatile Organic Carbon	5.0000	5.3030	106	mg/L	EPA-415.1
1713540-CCVC	Non-Volatile Organic Carbon	5.0000	5.3380	107	mg/L	EPA-415.1
1713540-CCVD	Non-Volatile Organic Carbon	5.0000	5.2530	105	mg/L	EPA-415.1
1713540-CCVE	Non-Volatile Organic Carbon	5.0000	5.2800	106	mg/L	EPA-415.1

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

HOLDING TIME SUMMARY
EPA-415.1

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
27EW-02_170725	07/25/17 09:40	07/25/17 22:20	07/28/17 06:50	6.00	28.00	07/31/17 13:56	6.00	28.00	
27EW-04_170725	07/25/17 11:10	07/25/17 22:20	07/28/17 06:50	6.00	28.00	07/31/17 15:08	6.00	28.00	
27EW-08_170725	07/25/17 11:15	07/25/17 22:20	07/28/17 06:50	6.00	28.00	07/31/17 15:22	6.00	28.00	
27EW-14_170725	07/25/17 11:40	07/25/17 22:20	07/28/17 06:50	6.00	28.00	07/31/17 15:37	6.00	28.00	
27EW-18_170725	07/25/17 09:35	07/25/17 22:20	07/28/17 06:50	6.00	28.00	07/31/17 15:51	6.00	28.00	
27EW-13_170725	07/25/17 12:50	07/25/17 22:20	07/28/17 06:50	6.00	28.00	07/31/17 16:34	6.00	28.00	
27EW-16_170725	07/25/17 11:50	07/25/17 22:20	07/28/17 06:50	6.00	28.00	07/31/17 16:48	6.00	28.00	
27EW-17_170725	07/25/17 12:35	07/25/17 22:20	07/28/17 06:50	6.00	28.00	07/31/17 17:02	6.00	28.00	
27MW14_170725	07/25/17 12:55	07/25/17 22:20	07/28/17 06:50	6.00	28.00	07/31/17 17:17	6.00	28.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument TOC2



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Analytical Runs

BC Laboratories

Sample Results

Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:00 am			3,205		0.000	
2	8:08 am			4,235		0.000	
3	8:16 am			3,367		0.000	
4	8:24 am			3,954		0.000	
Clean Up			Avg.	3,690		0.000	
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:36 am			3,893		0.000	
2	8:42 am			4,460		0.000	
QC Blank			Avg.	4,177		0.000	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:55 am			105,732		5.460	
2	9:01 am			103,659		5.348	
ICV1			Avg.	104,696		5.404	2.07
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:10 am			4,035		0.000	
2	9:15 am			4,508		0.018	
ICB1			Avg.	4,271		0.009	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:24 am			10,277		0.328	
2	9:30 am			10,478		0.339	
CRL1			Avg.	10,378		0.334	3.30
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:38 am			3,748		0.000	
2	9:44 am			4,373		0.011	
B[G2145-BLK1			Avg.	4,060		0.006	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:53 am			105,054		5.423	
2	9:58 am			105,049		5.423	
B[G2145-BS1			Avg.	105,051		5.423	0.00
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	10:07 am			24,778		1.233	
2	10:13 am			25,072		1.249	
1720060-02@E			Avg.	24,925		1.241	1.29

BC Laboratories

Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:21 am		24,316	1.209	
2	10:27 am		24,682	1.228	
B[G2145-ICC@E Avg.]			24,499	1.218	1.56
1	10:35 am		25,424	1.268	
2	10:41 am		25,617	1.278	
B[G2145-DUP1@E Avg.]			25,520	1.273	0.79
1	10:50 am		125,764	6.662	
2	10:56 am		125,275	6.635	
B[G2145-MS1@E Avg.]			125,519	6.649	0.41
1	11:04 am		125,500	6.648	
2	11:10 am		125,310	6.638	
B[G2145-MSD1@E Avg.]			125,405	6.643	0.15
1	11:18 am		37,464	1.915	
2	11:24 am		37,677	1.927	
1720060-01@10E Avg.]			37,570	1.921	0.62
1	11:32 am		20,645	1.011	
2	11:38 am		20,684	1.013	
1720060-03@E Avg.]			20,664	1.012	0.20
1	11:47 am		103,295	5.329	
2	11:53 am		103,301	5.329	
CCV1 Avg.]			103,298	5.329	0.00
1	12:01 pm		4,121	0.000	
2	12:07 pm		4,715	0.028	
CCB1 Avg.]			4,418	0.014	< PQL
1	12:15 pm		18,366	0.889	
2	12:21 pm		18,457	0.894	
1720060-04@E Avg.]			18,412	0.892	0.56

BC Laboratories

Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	12:30 pm		81,270	4.270	
2	12:36 pm		81,131	4.263	
1719961-02@A			Avg.	81,201	4.266
					0.16
1	12:44 pm		37,498	1.917	
2	12:50 pm		38,553	1.974	
1720315-01@2G			Avg.	38,026	1.946
					2.93
1	12:58 pm		5,924	0.093	
2	1:04 pm		6,688	0.135	
B[G2146-BLK1			Avg.	6,306	0.114
					< PQL
1	1:13 pm		106,581	5.505	
2	1:19 pm		106,348	5.493	
B[G2146-BS1			Avg.	106,464	5.499
					0.22
1	1:27 pm		28,762	1.448	
2	1:33 pm		29,208	1.471	
1720267-08@I			Avg.	28,985	1.459
					1.58
1	1:41 pm		103,763	5.354	
2	1:47 pm		104,176	5.376	
CCV2			Avg.	103,969	5.365
					0.41
1	1:56 pm		4,682	0.027	
2	2:02 pm		5,424	0.067	
CCB2			Avg.	5,053	0.047
					< PQL
1	2:10 pm		27,639	1.387	
2	2:16 pm		28,125	1.413	
B[G2146-ICC@I			Avg.	27,882	1.400
					1.86
1	2:24 pm		29,466	1.485	
2	2:30 pm		30,451	1.538	
B[G2146-DUP1@I			Avg.	29,959	1.512
					3.51

BC Laboratories

Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	2:39 pm		131,238	6.957	
2	2:45 pm		131,300	6.960	
B[G2146-MS1@I Avg.]			131,269	6.959	0.04
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	2:53 pm		130,174	6.899	
2	2:59 pm		130,378	6.910	
B[G2146-MSD1@I Avg.]			130,276	6.905	0.16
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	3:08 pm		135,996	7.212	
2	3:13 pm		136,879	7.260	
1720267-04@I Avg.]			136,437	7.236	0.66
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	3:22 pm		39,058	2.000	
2	3:28 pm		39,312	2.015	
1720267-09@I Avg.]			39,185	2.008	0.75
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	3:36 pm		32,384	1.642	
2	3:42 pm		32,626	1.655	
1720267-10@I Avg.]			32,505	1.648	0.79
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	3:51 pm		20,467	1.002	
2	3:56 pm		27,238	1.366	
1720267-11@I Avg.]			23,852	1.184	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	4:05 pm		12,783	0.588	
2	4:11 pm		17,406	0.837	
1720331-01@T Avg.]			15,094	0.713	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	4:19 pm		11,213	0.504	
2	4:25 pm		11,957	0.544	
1720331-02@T Avg.]			11,585	0.524	7.63
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	4:34 pm		103,991	5.366	
2	4:40 pm		104,399	5.387	
CCV3 Avg.]			104,195	5.376	0.39

BC Laboratories

Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	4:48 pm		5,525	0.073	
2	4:54 pm		5,872	0.091	
CCB3 Avg.			5,699	0.082	< PQL
1	5:02 pm		33,763	1.716	
2	5:08 pm		34,326	1.747	
1720029-05@200V Avg.			34,044	1.732	1.79
1	5:17 pm		86,205	4.536	
2	5:23 pm		87,697	4.616	
1720029-11@100 Avg.			86,951	4.576	1.75
1	5:31 pm		5,486	0.070	
2	5:37 pm		6,012	0.099	
B[G2147-BLK1 Avg.			5,749	0.084	< PQL
1	5:46 pm		106,010	5.475	
2	5:52 pm		106,024	5.475	
B[G2147-BS1 Avg.			106,017	5.475	0.00
1	6:00 pm		274,241	14.644	
2	6:06 pm		274,652	14.666	
1720313-05@20AF Avg.			274,446	14.655	0.15
1	6:14 pm		252,886	13.496	
2	6:21 pm		253,575	13.533	
B[G2147-ICC@20AF Avg.			253,231	13.515	0.27
1	6:29 pm		272,879	14.571	
2	6:35 pm		274,301	14.648	
B[G2147-DUP1@20AF Avg.			273,590	14.610	0.53
1	6:43 pm		361,857	19.355	
2	6:49 pm		362,983	19.415	
B[G2147-MS1@20AF Avg.			362,420	19.385	0.31

BC Laboratories

Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	6:58 pm		360,943	19.305	
2	7:04 pm		364,633	19.504	
B[G2147-MSD1@20AF			Avg. 362,788	19.405	1.03
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	7:12 pm		102,954	5.310	
2	7:18 pm		104,575	5.397	
CCV4			Avg. 103,765	5.354	1.63
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	7:27 pm		6,743	0.138	
2	7:32 pm		7,410	0.174	
CCB4			Avg. 7,076	0.156	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	7:41 pm		95,830	5.053	
2	7:47 pm		95,810	5.052	
1720313-06@2K			Avg. 95,820	5.053	0.02
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	7:55 pm		113,488	6.002	
2	8:01 pm		116,159	6.146	
1720313-07@20K			Avg. 114,823	6.074	2.37
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	8:10 pm		14,714	0.692	
2	8:16 pm		16,042	0.764	
1720313-08@K			Avg. 15,378	0.728	9.89
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	8:24 pm		14,449	0.678	
2	8:30 pm		15,433	0.731	
1720313-09@J			Avg. 14,941	0.705	7.52
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	8:39 pm		21,539	1.059	
2	8:44 pm		27,641	1.387	
1720332-01@T			Avg. 24,590	1.223	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	8:53 pm		95,941	5.058	
2	8:59 pm		105,064	5.550	
1720332-02@T			Avg. 100,503	5.304	9.28

BC Laboratories

Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:07 pm		19,843	0.968	
2	9:13 pm		23,166	1.147	
1720332-03@T			Avg. 21,504	1.058	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:22 pm		8,094	0.211	
2	9:27 pm		9,036	0.261	
B[G2148-BLK1			Avg. 8,565	0.236	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:36 pm		107,133	5.535	
2	9:42 pm		106,496	5.501	
CCV5			Avg. 106,815	5.518	0.62
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:51 pm		6,959	0.150	
2	9:57 pm		7,690	0.189	
CCB5			Avg. 7,324	0.169	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:05 pm		109,034	5.637	
2	10:11 pm		108,191	5.592	
B[G2148-BS1			Avg. 108,613	5.615	0.80
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:20 pm		83,999	4.417	
2	10:26 pm		84,684	4.454	
1720405-01@J			Avg. 84,342	4.436	0.83
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:34 pm		77,511	4.068	
2	10:40 pm		77,619	4.074	
B[G2148-ICC@J			Avg. 77,565	4.071	0.15
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:49 pm		85,093	4.476	
2	10:54 pm		85,750	4.511	
B[G2148-DUP1@J			Avg. 85,421	4.494	0.78
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	11:03 pm		183,232	9.752	
2	11:09 pm		183,121	9.746	
B[G2148-MS1@J			Avg. 183,177	9.749	0.06

BC Laboratories

Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	11:18 pm		182,423	9.708	
2	11:23 pm		181,945	9.683	
B[G2148-MSD1@J Avg.			182,184	9.695	0.26
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	11:32 pm		44,557	2.297	
2	11:38 pm		44,497	2.293	
1720405-03@J Avg.			44,527	2.295	0.17
Rep #	Time	Date: 07/28/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	11:46 pm		91,017	4.794	
2	11:52 pm		91,715	4.832	
1720405-04@J Avg.			91,366	4.813	0.79
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	12:01 am		87,758	4.619	
2	12:07 am		88,107	4.638	
1720405-05@J Avg.			87,933	4.629	0.41
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	12:15 am		50,736	2.629	
2	12:21 am		51,149	2.650	
1720405-06@I Avg.			50,942	2.639	0.80
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	12:30 am		106,748	5.514	
2	12:36 am		106,599	5.506	
CCV6 Avg.			106,673	5.510	0.15
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	12:44 am		6,954	0.149	
2	12:50 am		7,358	0.171	
CCB6 Avg.			7,156	0.160	< PQL
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	12:59 am		79,290	4.164	
2	1:05 am		80,022	4.203	
1720405-13@J Avg.			79,656	4.184	0.93
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	1:13 am		45,988	2.374	
2	1:19 am		46,387	2.394	
1720405-14@J Avg.			46,187	2.384	0.84

BC Laboratories

Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	1:28 am		76,146	3.995	
2	1:34 am		76,706	4.025	
1720405-15@J Avg.			76,426	4.010	0.75
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	1:42 am		114,724	6.069	
2	1:48 am		115,585	6.115	
1720405-17@I Avg.			115,154	6.092	0.76
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	1:57 am		107,180	5.537	
2	2:03 am		107,318	5.545	
CCV7 Avg.			107,249	5.541	0.14
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	2:11 am		7,186	0.162	
2	2:17 am		7,373	0.172	
CCB7 Avg.			7,279	0.167	5.99
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	2:26 am		16,111	0.767	
2	2:32 am		16,865	0.808	
1720235-01@200K Avg.			16,488	0.788	5.21
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	2:40 am		22,543	1.113	
2	2:46 am		22,864	1.130	
1720235-02@100K Avg.			22,703	1.122	1.52
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	2:55 am		11,798	0.536	
2	3:01 am		12,548	0.576	
1720235-03@500K Avg.			12,173	0.556	7.19
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	3:09 am		51,627	2.677	
2	3:15 am		53,270	2.765	
1720108-08@20C Avg.			52,448	2.721	3.23
Rep #	Time	Date: 07/29/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	3:24 am		56,372	2.932	
2	3:30 am		65,713	3.434	
1720349-01@2F Avg.			61,042	3.183	< PQL

BC Laboratories

Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:38 am			11,416		0.514	
2	3:44 am			18,217		0.881	
IB			Avg.	14,816		0.698	< PQL
<hr/>							
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:53 am			9,708		0.423	
2	3:59 am			14,010		0.654	
IB			Avg.	11,859		0.539	< PQL
<hr/>							
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:07 am			8,569		0.362	
2	4:13 am			11,086		0.497	
IB			Avg.	9,828		0.430	< PQL
<hr/>							
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:22 am			8,992		0.385	
2	4:28 am			11,049		0.495	
IB			Avg.	10,021		0.440	< PQL
<hr/>							
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:37 am			105,223		5.432	
2	4:42 am			107,350		5.547	
CCV8			Avg.	106,286		5.490	2.09
<hr/>							
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:51 am			7,287		0.167	
2	4:57 am			8,389		0.227	
CCB8			Avg.	7,838		0.197	< PQL

BC Laboratories

Sample Results

Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:05 am		102,931	5.309	
2	9:10 am		101,682	5.242	
CCV9 Avg.			102,307	5.275	1.27
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:18 am		4,147	0.000	
2	9:24 am		4,243	0.004	
CCB9 Avg.			4,195	0.002	< PQL
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:33 am		125,417	6.644	
2	9:39 am		123,085	6.518	
1720313-05@50AF Avg.			124,251	6.581	1.91
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:47 am		120,825	6.397	
2	9:53 am		119,390	6.320	
B[G2147-ICC@50AF Avg.			120,108	6.359	1.21
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:02 am		128,378	6.803	
2	10:08 am		127,439	6.752	
B[G2147-DUP1@50AF Avg.			127,909	6.778	0.75
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:16 am		217,643	11.602	
2	10:22 am		214,855	11.452	
B[G2147-MS1@50AF Avg.			216,249	11.527	1.30
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:30 am		216,970	11.566	
2	10:36 am		215,068	11.463	
B[G2147-MSD1@50AF Avg.			216,019	11.515	0.89
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:44 am		102,458	5.284	
2	10:50 am		101,649	5.240	
CCVA Avg.			102,053	5.262	0.84

BC Laboratories

Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:58 am		3,178	0.000	
2	11:04 am		3,451	0.000	
CCBA Avg.			3,315	0.000	< PQL
1	11:13 am		99,386	5.244	
2	11:19 am		97,855	5.162	
1720313-06@2K Avg.			98,621	5.203	1.58
1	11:27 am		116,622	6.171	
2	11:33 am		117,170	6.200	
1720313-07@20K Avg.			116,896	6.185	0.47
1	11:41 am		16,566	0.792	
2	11:47 am		17,387	0.835	
1720313-08@K Avg.			16,976	0.813	5.29
1	11:56 am		20,258	0.990	
2	12:01 pm		20,700	1.014	
1720313-09@J Avg.			20,479	1.002	2.40
1	12:10 pm		21,733	1.070	
2	12:16 pm		27,581	1.383	
1720332-01@T Avg.			24,657	1.227	< PQL
1	12:24 pm		95,985	5.061	
2	12:30 pm		105,653	5.581	
1720332-02@T Avg.			100,819	5.321	9.77
1	12:38 pm		21,479	1.055	
2	12:44 pm		24,904	1.240	
1720332-03@T Avg.			23,192	1.148	< PQL
1	12:52 pm		5,234	0.057	
2	12:58 pm		6,297	0.114	
B[G2148-BLK1 Avg.			5,765	0.086	< PQL

BC Laboratories

Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	1:07 pm		102,380	5.279	
2	1:13 pm		103,260	5.327	
CCVB Avg.			102,820	5.303	0.91
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	1:21 pm		4,190	0.001	
2	1:27 pm		4,479	0.016	
CCBB Avg.			4,334	0.009	< PQL
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	1:36 pm		109,953	5.812	
2	1:41 pm		110,910	5.864	
B[G2148-BS1 Avg.]			110,432	5.838	0.89
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	1:50 pm		84,612	4.450	
2	1:56 pm		86,391	4.546	
1720405-01@J Avg.			85,501	4.498	2.13
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	2:04 pm		80,419	4.225	
2	2:10 pm		81,725	4.295	
B[G2148-ICC@J Avg.]			81,072	4.260	1.64
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	2:19 pm		85,642	4.505	
2	2:25 pm		86,706	4.563	
B[G2148-DUP1@J Avg.]			86,174	4.534	1.28
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	2:33 pm		182,760	9.726	
2	2:39 pm		184,886	9.841	
B[G2148-MS1@J Avg.]			183,823	9.784	1.18
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	2:48 pm		181,623	9.665	
2	2:54 pm		183,804	9.783	
B[G2148-MSD1@J Avg.]			182,713	9.724	1.21
Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	3:02 pm		45,899	2.369	
2	3:08 pm		46,325	2.392	
1720405-03@J Avg.			46,112	2.381	0.97

BC Laboratories

Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	3:16 pm		91,432	4.817	
2	3:22 pm		93,369	4.921	
1720405-04@J Avg.			92,401	4.869	2.14
1	3:31 pm		89,307	4.702	
2	3:36 pm		90,439	4.763	
1720405-05@J Avg.			89,873	4.733	1.29
1	3:45 pm		53,309	2.767	
2	3:51 pm		54,344	2.823	
1720405-06@I Avg.			53,826	2.795	2.00
1	3:59 pm		103,290	5.328	
2	4:05 pm		103,638	5.347	
CCVC Avg.			103,464	5.338	0.36
1	4:13 pm		5,361	0.064	
2	4:19 pm		5,194	0.055	
CCBC Avg.			5,277	0.060	< PQL
1	4:28 pm		80,390	4.222	
2	4:34 pm		81,597	4.288	
1720405-13@J Avg.			80,993	4.255	1.55
1	4:42 pm		45,681	2.357	
2	4:48 pm		46,337	2.392	
1720405-14@J Avg.			46,009	2.374	1.47
1	4:56 pm		75,749	3.974	
2	5:02 pm		77,950	4.092	
1720405-15@J Avg.			76,849	4.033	2.93
1	5:11 pm		112,409	5.944	
2	5:17 pm		113,992	6.029	
1720405-17@I Avg.			113,200	5.986	1.42

BC Laboratories

Rep #	Time	Date: 07/31/2017	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	5:25 pm		101,391	5.226	
2	5:31 pm		102,377	5.279	
CCVD Avg.			101,884	5.253	1.01
1	5:39 pm		4,290	0.006	
2	5:45 pm		4,419	0.013	
CCBD Avg.			4,354	0.010	< PQL
1	5:54 pm		16,311	0.778	
2	6:00 pm		16,725	0.800	
1720235-01 @ 200K Avg.			16,518	0.789	2.79
1	6:08 pm		22,816	1.128	
2	6:14 pm		23,037	1.140	
1720235-02 @ 100K Avg.			22,927	1.134	1.06
1	6:22 pm		12,340	0.565	
2	6:28 pm		12,979	0.598	
1720235-03 @ 500K Avg.			12,659	0.581	5.67
1	6:37 pm		51,537	2.672	
2	6:42 pm		53,199	2.761	
1720108-08 @ 20C Avg.			52,368	2.716	3.28
1	6:51 pm		61,130	3.188	
2	6:57 pm		68,680	3.594	
1720349-01 @ 2F Avg.			64,905	3.391	< PQL
1	7:05 pm		13,091	0.605	
2	7:11 pm		19,212	0.934	
IB Avg.			16,151	0.770	< PQL
1	7:19 pm		11,844	0.537	
2	7:25 pm		14,659	0.689	
IB Avg.			13,251	0.613	< PQL

BC Laboratories

Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	7:34 pm			10,421		0.462	
2	7:40 pm			12,524		0.575	
IB			Avg.	11,473		0.519	< PQL
<hr/>							
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	7:48 pm			10,479		0.465	
2	7:54 pm			11,655		0.528	
IB			Avg.	11,067		0.496	< PQL
<hr/>							
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:03 pm			103,488		5.338	
2	8:08 pm			105,334		5.438	
B[G2148-BS1			Avg.	104,411		5.388	1.86
<hr/>							
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:17 pm			101,360		5.225	
2	8:23 pm			103,412		5.335	
CCVE			Avg.	102,386		5.280	2.08
<hr/>							
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:31 pm			4,359		0.010	
2	8:37 pm			5,122		0.051	
CCBE			Avg.	4,740		0.030	< PQL



Raw Data - Calibration Summary



OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Sample Results Summary

Spl Vial		Num Act		Method	Type	Dil	Customer ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
#	#	Rep	Rep											
1	-			DefaultCleanUpMethod	Clean Up	1 : 1	00000000	TIC	282	0.000	0.000	111	39.38	
3	1			170629 - 5 mls - Jun 29, 2017; 03-00-31 PM	Standard	1 : 1	00000000	TOC	4,910	0.000	0.000	479	9.76	
4	2			170629 - 5 mls - Jun 29, 2017; 03-00-31 PM	Standard	1 : 1	00000000	TOC	6,686	0.000	0.000	608	9.10	
5	3			170629 - 5 mls - Jun 29, 2017; 03-00-31 PM	Standard	1 : 1	00000000	TOC	26,062	5.000	1.000	233	0.89	
6	4			170629 - 5 mls - Jun 29, 2017; 03-00-31 PM	Standard	1 : 1	00000000	TOC	100,281	25.000	5.000	477	0.48	
				170629 - 5 mls - Jun 29, 2017; 03-00-31 PM	Standard	1 : 1	00000000	TOC	192,988	50.000	10.000	1,456	0.75	

OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Sample Results

Spl #: 1 Sample ID : Clean Up Type : Clean Up Date: 06/29/2017 Status: Passed
 Vial #: - Method : DefaultCleanUpMethod Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:14 pm	447	0.000	0.000	5,230	0.000	0.000
2	3:22 pm	167	0.000	0.000	5,734	0.000	0.000
3	3:29 pm	147	0.000	0.000	4,610	0.000	0.000
4	3:37 pm	290	0.000	0.000	4,772	0.000	0.000
5	3:44 pm	314	0.000	0.000	4,618	0.000	0.000
6	3:52 pm	330	0.000	0.000	4,493	0.000	0.000
Avg.		282	0.000	0.000	4,910	0.000	0.000
Std.Dev.		111			479		
% RSD.		39.38			9.76		

Spl #: 3 Sample ID : TOC-RW Type : Standard Date: 06/29/2017 Status: Passed
 Vial #: 1 Method : 170629 - 5 mls - Jun 29, 2017; Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:21 pm	-	-	-	5,975	0.000	0.000
2	4:27 pm	-	-	-	7,250	0.000	0.000
3	4:33 pm	-	-	-	6,387	0.000	0.000
4	4:39 pm	-	-	-	7,130	0.000	0.000
Avg.		-	-	-	6,686	0.000	0.000
Std.Dev.					608		
% RSD.					9.10		

OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Spl #: 4 Sample ID : TOC-Std#1-1.000 PPM Type : Standard Date: 06/29/2017 Status: Passed
 Vial #: 2 Method : 170629 - 5 mls - Jun 29, 2017; Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:48 pm	-	-	-	26,199	5.000	1.000
2	4:54 pm	-	-	-	26,116	5.000	1.000
3	5:00 pm	-	-	-	25,718	5.000	1.000
4	5:05 pm	-	-	-	26,214	5.000	1.000
Avg.		-	-	-	26,062	5.000	1.000
Std.Dev.					233		
% RSD.					0.89		

Spl #: 5 Sample ID : TOC-Std#2-5.000 PPM Type : Standard Date: 06/29/2017 Status: Passed
 Vial #: 3 Method : 170629 - 5 mls - Jun 29, 2017; Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:14 pm	-	-	-	100,930	25.000	5.000
2	5:19 pm	-	-	-	99,990	25.000	5.000
3	5:26 pm	-	-	-	100,341	25.000	5.000
4	5:31 pm	-	-	-	99,865	25.000	5.000
Avg.		-	-	-	100,281	25.000	5.000
Std.Dev.					477		
% RSD.					0.48		



Date Prepared: 06/30/2017 By:

Date Approved: By:

TOC

OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Spl #: 6 Sample ID : TOC-Std#3-10.000 PPM Type : Standard Date: 06/29/2017 Status: Passed
 Vial #: 4 Method : 170629 - 5 mls - Jun 29, 2017; Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:40 pm	-	-	-	194,519	50.000	10.000
2	5:46 pm	-	-	-	192,526	50.000	10.000
3	5:52 pm	-	-	-	193,725	50.000	10.000
4	5:57 pm	-	-	-	191,182	50.000	10.000
Avg.		-	-	-	192,988	50.000	10.000
Std.Dev.					1,456		
% RSD.					0.75		

OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Method Summary

Method Details

Method Name: 170629 - 5 mls - Jun 29, 2017
Date Created: 06/29/2017
Time Created: 15:01
Created By: ALW

Pre-Processing

Sample Dilution: Disabled
Dilution Mode: Automatic
Dilution Factor: 1 : 1
Sample Stirring in A/S: Enabled

Times

	React	Detect
TIC	01:30	03:00
TOC	02:00	03:15

Temp

	React	Detect
TIC	70	70
TOC	98	98

Analysis Mode: NPOC Only

Sparging Mode: Internal
Pre-Acid Volume (mL): 1.000
Sparge Time (mm:ss): 02:00

Outlier Removal Criteria

Additional Replicates: 0
Max. % RSD: 3.00

Peak Detection Parameters

Signal-to-Noise Ratio: 3
Minimum Peak Width (min:sec): 00:30
Peak Resolution to BaseLine(%): 99

Volumes

Sample Volume (mL): 5.000
Acid Volume (mL): 0.500
Persulfate Volume(mL): 1.000

Rinses

Rinse Volume (mL): 10.000
Rinses Per Sample: 1
Rinses Per Replicate: 0

Other

SysPressure: 20.00

Calibration Summary

Calibration Generation

Generation Mode: Manual
of Stds: 5
Dilution Factor: 10 : 1
Dilution Volume (mL): 1.000
Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Low	High	Failure
RF (ugC/K-cts)	-	-	-
R2	0.995	1.000	Abort
Offset (area) (cts)	-	-	-
Offset (mass) (ugC)	-	-	-

Calibration Mode

Primary Mode: TOC
User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10,000.00	Continue	Continue
QC #1	5.000	10,000.00	Continue	Continue
QC #2	5.000	15,000.00	Continue	Continue
QC #3	1.000	50,000.00	Continue	Continue
QC #4	0.001	100,000.00	Continue	Continue
SST	0.000	0.00	Continue	Continue

Date Prepared: 06/30/2017 **By:**

Date Approved: **By:**

TOC

OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Calibration Details

Calibration Mode: TOC
Date Calibrated: 06/29/2017
Time Calibrated: 5:57 pm
Calibrated By: ALW
RF (ugC/k-cts): 0.2688
R2: 0.9999
Offset (area)(cts): 7099
Offset (mass)(ugC): -1.908
Reagent Blank (cts): 1,837

Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
of Reagent Blanks: 2
Total Flowrate w/EFC: 50 ml/min
Check Standards: Subtract Offset
Regression type: Unweighted



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Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2148

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - General Preparation

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720405-01 J	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720405-03 J	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720405-04 J	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720405-05 J	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720405-06 I	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720405-13 J	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720405-14 J	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720405-15 I	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720405-17 I	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
B[G2148-BLK1	QC	7/28/2017 6:50AM	ALW	100	100					
B[G2148-BS1	QC	7/28/2017 6:50AM	ALW	100	100	7D13023		500		
B[G2148-DUP1	QC	7/28/2017 6:50AM	ALW	100	100		1720405-01			
B[G2148-MS1	QC	7/28/2017 6:50AM	ALW	99.5	100	7D13023	1720405-01	500		
B[G2148-MSD1	QC	7/28/2017 6:50AM	ALW	99.5	100	7D13023	1720405-01	500		

Spike Mixes	Description	Solvent	Prepared	Expires
7D13023	TOC KHP 1000 /SPIKE	H3P04 IN WATER	4/13/2017 by ** Vendor **	3/31/2018



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713540

Instrument: TOC2

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713540-ICV1	QC		1		7F15031		
1713540-ICB1	QC		2				
1713540-CRL1	QC		3		7G24019		
B[G2145-BLK1	QC		4				
B[G2145-BS1	QC		5				
1720060-02	i415.1w NVOC	E	6				
1720060-02	iSM5310Cw NVOC	E	6				BatchQC
B[G2145-DUP1	QC		7				
B[G2145-MS1	QC		8				
B[G2145-MSD1	QC		9				
1720060-01	i415.1w NVOC	E	10				
1720060-03	i415.1w NVOC	E	11				
1713540-CCV1	QC		12		7G24020		
1713540-CCB1	QC		13				
1720060-04	i415.1w NVOC	E	14				
1719961-02	i415.1w NVOC	A	15				
1720315-01	iSM5310Cw NVOC	G	16				
B[G2146-BLK1	QC		17				
B[G2146-BS1	QC		18				
1720267-08	i415.1w NVOC	I	19				
1713540-CCV2	QC		20		7G24020		
1713540-CCB2	QC		21				
B[G2146-DUP1	QC		22				
B[G2146-MS1	QC		23				
B[G2146-MSD1	QC		24				
1720267-04	i415.1w NVOC	J	25				
1720267-09	i415.1w NVOC	E	26				
1720267-10	i415.1w NVOC	I	27				
1720267-11	i415.1w NVOC	I	28				
1713540-CCV3	QC		29		7G24020		
1713540-CCB3	QC		30				
1720029-05	i415.1w NVOC	V	31				
1720029-11	i415.1w NVOC	O	32				
B[G2147-BLK1	QC		33				
B[G2147-BS1	QC		34				
1713540-CCV4	QC		35		7G24020		
1713540-CCB4	QC		36				
1713540-CCV9	QC		37		7G24020		
1713540-CCB9	QC		38				



ANALYSIS SEQUENCE

1713540

Instrument: TOC2

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720313-05	i415.1w NVOC	AF	39				
B[G2147-DUP1	QC		40				
B[G2147-MS1	QC		41				
B[G2147-MSD1	QC		42				
1713540-CCVA	QC		43		7G24020		
1713540-CCBA	QC		44				
1720313-06	i415.1w NVOC	K	45				
1720313-07	i415.1w NVOC	K	46				
1720313-08	i415.1w NVOC	K	47				
1720313-09	i415.1w NVOC	J	48				
B[G2148-BLK1	QC		49				
1713540-CCVB	QC		50		7G24020		
1713540-CCBB	QC		51				
1720405-01	i415.1w NVOC	J	52				
B[G2148-DUP1	QC		53				
B[G2148-MS1	QC		54				
B[G2148-MSD1	QC		55				
1720405-03	i415.1w NVOC	J	56				
1720405-04	i415.1w NVOC	J	57				
1720405-05	i415.1w NVOC	J	58				
1720405-06	i415.1w NVOC	I	59				
1713540-CCVC	QC		60		7G24020		
1713540-CCBC	QC		61				
1720405-13	i415.1w NVOC	J	62				
1720405-14	i415.1w NVOC	J	63				
1720405-15	i415.1w NVOC	I	64				
1720405-17	i415.1w NVOC	I	65				
1713540-CCVD	QC		66		7G24020		
1713540-CCBD	QC		67				
1720235-01	iSM5310Cw NVOC	K	68				
1720235-02	iSM5310Cw NVOC	K	69				
1720235-03	iSM5310Cw NVOC	K	70				
1720108-08	i415.1w NVOC	C	71				
1720349-01	i415.1w NVOC	F	72				
B[G2148-BS1	QC		73				
1713540-CCVE	QC		74		7G24020		
1713540-CCBE	QC		75				



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Environmental Testing Laboratory Since 1949



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20405
Class: WET
Method: SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE
SM-4500SD

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Client Sample Id:

Lab Sample Id:

27EW-02_170725
27EW-04_170725
27EW-08_170725
27EW-14_170725
27EW-18_170725
27EW-13_170725
27EW-16_170725
27EW-17_170725
27MW14_170725

1720405-01
1720405-03
1720405-04
1720405-05
1720405-06
1720405-13
1720405-14
1720405-15
1720405-17

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: Sara Guron

Date: 08-25-2017

Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS

SM-4500SD

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Instrument: SPEC06

Analyte	DL	LOD	LOQ	Units
Total Sulfide	0.05	0.1	0.1	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27EW-02_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-01

File ID:

Sampled: 07/25/17 09:40

Prepared: 08/01/17 14:00

Analyzed: 08/01/17 14:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 25 ml / 25 ml

Batch: B[H0134

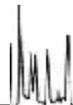
Sequence:

1713612

Calibration: UNASSIGNED

Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27EW-04_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-03

File ID:

Sampled: 07/25/17 11:10

Prepared: 08/01/17 14:00

Analyzed: 08/01/17 14:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 25 ml / 25 ml

Batch: B[H0134

Sequence:

1713612

Calibration: UNASSIGNED

Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27EW-08_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-04

File ID:

Sampled: 07/25/17 11:15

Prepared: 08/01/17 14:00

Analyzed: 08/01/17 14:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 25 ml / 25 ml

Batch: B[H0134

Sequence:

1713612

Calibration: UNASSIGNED

Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27EW-14_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-05

File ID:

Sampled: 07/25/17 11:40

Prepared: 08/01/17 14:00

Analyzed: 08/01/17 14:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 25 ml / 25 ml

Batch: B[H0134

Sequence:

1713612

Calibration: UNASSIGNED

Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27EW-18_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-06

File ID:

Sampled: 07/25/17 09:35

Prepared: 08/01/17 14:00

Analyzed: 08/01/17 14:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 25 ml / 25 ml

Batch: B[H0134

Sequence:

1713612

Calibration: UNASSIGNED

Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27EW-13_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-13

File ID:

Sampled: 07/25/17 12:50

Prepared: 08/01/17 14:00

Analyzed: 08/01/17 14:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 25 ml / 25 ml

Batch: B[H0134

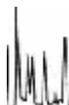
Sequence:

1713612

Calibration: UNASSIGNED

Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27EW-16_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-14

File ID:

Sampled: 07/25/17 11:50

Prepared: 08/01/17 14:00

Analyzed: 08/01/17 14:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 25 ml / 25 ml

Batch: B[H0134

Sequence:

1713612

Calibration: UNASSIGNED

Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27EW-17_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-15

File ID:

Sampled: 07/25/17 12:35

Prepared: 08/01/17 14:00

Analyzed: 08/01/17 14:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 25 ml / 25 ml

Batch: B[H0134

Sequence:

1713612

Calibration: UNASSIGNED

Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27MW14_170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720405-17

File ID:

Sampled: 07/25/17 12:55

Prepared: 08/01/17 14:00

Analyzed: 08/01/17 14:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 25 ml / 25 ml

Batch: B[H0134

Sequence:

1713612

Calibration: UNASSIGNED

Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure- 9210 Sky Park Court #200 San Diego, CA 92123	Reported: 8/25/2017 9:39:35AM Project: Alameda Project Number: 5023146096 Project Manager: Kevin Olness
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METHOD BLANK DATA SHEET
SM-4500SD

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20405</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[H0134-BLK1</u>
Prepared:	<u>08/01/17 14:00</u>	Preparation:	<u>No Prep</u>
Analyzed:	<u>08/01/17 14:00</u>	Instrument:	<u>SPEC06</u>
Batch:	<u>B[H0134</u>	Sequence:	<u>1713612</u>
		Calibration:	<u>UNASSIGNED</u>

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES
SM-4500SD

27EW-02 170725

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[H0134-DUP1

Batch: B[H0134

Lab Source ID: 1720405-01

Preparation: No Prep

Initial/Final: 25 ml / 25 ml

Source Sample Name: 27EW-02 170725

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Total Sulfide	10	0.0054100		ND				SM-4500SD

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY
SM-4500SD

27EW-02 170725

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[H0134] Laboratory ID: B[H0134-MS1]
Preparation: No Prep Initial/Final: 25 ml / 25 ml
Source Sample Number: 1720405-01

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Total Sulfide	0.50000	ND	0.39654	79.3 *	80 - 120

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Total Sulfide	0.50000	0.40073	80.1	1.05	10	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
SM-4500SD

Laboratory: BC Laboratories SDG: 17-20405
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[H0134 Laboratory ID: B[H0134-BS1
Preparation: No Prep Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Total Sulfide	0.50000	0.49569	99.1	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**BLANKS
SM-4500SD**

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Instrument ID: SPEC06

Project: Alameda

Sequence: 1713612

Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	DL	LOD	LOQ	Units	C	Method
1713612-CCB1	Total Sulfide	0.0000	0.050		0.10	mg/L	U	SM-4500SD
1713612-CCB2	Total Sulfide	0.0000	0.050		0.10	mg/L	U	SM-4500SD
1713612-CCB3	Total Sulfide	0.0000	0.050		0.10	mg/L	U	SM-4500SD
1713612-ICB1	Total Sulfide	0.0000	0.050		0.10	mg/L	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL AND CONTINUING CALIBRATION CHECK
SM-4500SD

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Instrument ID: SPEC06

Calibration: UNASSIGNED

Control Limit: +/- %

Sequence: 1713612

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713612-CCV1	Total Sulfide	0.50000	0.49569	99.1	mg/L	SM-4500SD
1713612-CCV2	Total Sulfide	0.50000	0.49569	99.1	mg/L	SM-4500SD
1713612-CCV3	Total Sulfide	0.50000	0.49569	99.1	mg/L	SM-4500SD
1713612-ICV1	Total Sulfide	0.50000	0.48731	97.5	mg/L	SM-4500SD

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

HOLDING TIME SUMMARY
SM-4500SD

Laboratory: BC Laboratories

SDG: 17-20405

Client: AMEC Environmental & Infrastructure- SAMCN

Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
27EW-02_170725	07/25/17 09:40	07/25/17 22:20	08/01/17 14:00	7.00	7.00	08/01/17 14:00	7.00	7.00	
27EW-04_170725	07/25/17 11:10	07/25/17 22:20	08/01/17 14:00	7.00	7.00	08/01/17 14:00	7.00	7.00	
27EW-08_170725	07/25/17 11:15	07/25/17 22:20	08/01/17 14:00	7.00	7.00	08/01/17 14:00	7.00	7.00	
27EW-14_170725	07/25/17 11:40	07/25/17 22:20	08/01/17 14:00	7.00	7.00	08/01/17 14:00	7.00	7.00	
27EW-18_170725	07/25/17 09:35	07/25/17 22:20	08/01/17 14:00	7.00	7.00	08/01/17 14:00	7.00	7.00	
27EW-13_170725	07/25/17 12:50	07/25/17 22:20	08/01/17 14:00	7.00	7.00	08/01/17 14:00	7.00	7.00	
27EW-16_170725	07/25/17 11:50	07/25/17 22:20	08/01/17 14:00	7.00	7.00	08/01/17 14:00	7.00	7.00	
27EW-17_170725	07/25/17 12:35	07/25/17 22:20	08/01/17 14:00	7.00	7.00	08/01/17 14:00	7.00	7.00	
27MW14_170725	07/25/17 12:55	07/25/17 22:20	08/01/17 14:00	7.00	7.00	08/01/17 14:00	7.00	7.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument SPEC06



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[H0134

BC Laboratories

Printed: 8/25/2017 9:39:35AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720405-01 I	iSM4500SDw Total Sulfide	8/1/2017 2:00PM	DIW	25	25					
1720405-03 I	iSM4500SDw Total Sulfide	8/1/2017 2:00PM	DIW	25	25					
1720405-04 I	iSM4500SDw Total Sulfide	8/1/2017 2:00PM	DIW	25	25					
1720405-05 I	iSM4500SDw Total Sulfide	8/1/2017 2:00PM	DIW	25	25					
1720405-06 H	iSM4500SDw Total Sulfide	8/1/2017 2:00PM	DIW	25	25					
1720405-13 I	iSM4500SDw Total Sulfide	8/1/2017 2:00PM	DIW	25	25					
1720405-14 I	iSM4500SDw Total Sulfide	8/1/2017 2:00PM	DIW	25	25					
1720405-15 H	iSM4500SDw Total Sulfide	8/1/2017 2:00PM	DIW	25	25					
1720405-17 H	iSM4500SDw Total Sulfide	8/1/2017 2:00PM	DIW	25	25					
1720548-01 D	iSM4500SDw Total Sulfide	8/1/2017 2:00PM	DIW	25	25					
B[H0134-BLK1	QC	8/1/2017 2:00PM	DIW	25	25					
B[H0134-BS1	QC	8/1/2017 2:00PM	DIW	25	25	7G06078		2500		
B[H0134-DUP1	QC	8/1/2017 2:00PM	DIW	25	25		1720405-01			
B[H0134-MS1	QC	8/1/2017 2:00PM	DIW	25	25	7G06078	1720405-01	2500		
B[H0134-MSD1	QC	8/1/2017 2:00PM	DIW	25	25	7G06078	1720405-01	2500		

Spike Mixes	Description	Solvent	Prepared	Expires
7G06078	SULFIDE 5.0 WORK	H2O	7/6/2017 by Daniel Wenceslao	1/8/2018



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713612

Instrument: SPEC06

Calibration ID:

Sequence Date: 08/01/2017

Printed: 8/25/2017 9:39:35AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713612-ICV1	QC		1		7G07020		
1713612-ICB1	QC		2				
B[H0134-BS1	QC		3				
B[H0138-BS1	QC		4				
B[H0134-BLK1	QC		5				
B[H0138-BLK1	QC		6				
1720405-01	iSM4500SDw Total Sulfide	I	7				
B[H0134-DUP1	QC		8				
B[H0134-MS1	QC		9				
B[H0134-MSD1	QC		10				
1720405-03	iSM4500SDw Total Sulfide	I	11				
1720405-04	iSM4500SDw Total Sulfide	I	12				
1720405-05	iSM4500SDw Total Sulfide	I	13				
1720405-06	iSM4500SDw Total Sulfide	H	14				
1713612-CCV1	QC		15		7G07021		
1713612-CCB1	QC		16				
1720405-13	iSM4500SDw Total Sulfide	I	17				
1720405-14	iSM4500SDw Total Sulfide	I	18				
1720405-15	iSM4500SDw Total Sulfide	H	19				
1720405-17	iSM4500SDw Total Sulfide	H	20				
1720548-01	iSM4500SDw Total Sulfide	D	21				
1720353-01	iSM4500SDw Diss Sulfide	O	22				
B[H0138-DUP1	QC		23				
B[H0138-MS1	QC		24				
B[H0138-MSD1	QC		25				
1720352-01	iSM4500SDw Diss Sulfide	O	26				
1713612-CCV2	QC		27		7G07021		
1713612-CCB2	QC		28				
1720355-01	iSM4500SDw Diss Sulfide	O	29				
1720356-01	iSM4500SDw Diss Sulfide	C	30				
1720488-01	iSM4500SDw Diss Sulfide	O	31				
1720664-01	iSM4500SDw Diss Sulfide	O	32				
1720665-01	iSM4500SDw Diss Sulfide	O	33				
1720813-01	iSM4500SDw Diss Sulfide	O	34				
1720814-01	iSM4500SDw Diss Sulfide	O	35				
1720981-01	iSM4500SDw Diss Sulfide	A	36				
1713612-CCV3	QC		37		7G07021		
1713612-CCB3	QC		38				

Data Review Report

Sequence and Sample #	Sample Name	Batch #	Analysed
1713612			
1	1713612-ICV1	1713612	8/1/2017 2:00:00PM
2	1713612-ICB1	1713612	8/1/2017 2:00:00PM
3	B[H0134-BS1	B[H0134	8/1/2017 2:00:00PM
4	B[H0138-BS1	B[H0138	8/1/2017 2:00:00PM
5	B[H0134-BLK1	B[H0134	8/1/2017 2:00:00PM
6	B[H0138-BLK1	B[H0138	8/1/2017 2:00:00PM
7	1720405-01	B[H0134	8/1/2017 2:00:00PM
8	B[H0134-DUP1	B[H0134	8/1/2017 2:00:00PM
9	B[H0134-MS1	B[H0134	8/1/2017 2:00:00PM
10	B[H0134-MSD1	B[H0134	8/1/2017 2:00:00PM
11	1720405-03	B[H0134	8/1/2017 2:00:00PM
12	1720405-04	B[H0134	8/1/2017 2:00:00PM
13	1720405-05	B[H0134	8/1/2017 2:00:00PM
14	1720405-06	B[H0134	8/1/2017 2:00:00PM
15	1713612-CCV1	1713612	8/1/2017 2:00:00PM
16	1713612-CCB1	1713612	8/1/2017 2:00:00PM
17	1720405-13	B[H0134	8/1/2017 2:00:00PM
18	1720405-14	B[H0134	8/1/2017 2:00:00PM
19	1720405-15	B[H0134	8/1/2017 2:00:00PM
20	1720405-17	B[H0134	8/1/2017 2:00:00PM
21	1720548-01	B[H0134	8/1/2017 2:00:00PM
22	1720353-01	B[H0138	8/1/2017 2:00:00PM
23	B[H0138-DUP1	B[H0138	8/1/2017 2:00:00PM
24	B[H0138-MS1	B[H0138	8/1/2017 2:00:00PM
25	B[H0138-MSD1	B[H0138	8/1/2017 2:00:00PM
26	1720352-01	B[H0138	8/1/2017 2:00:00PM
27	1713612-CCV2	1713612	8/1/2017 2:00:00PM
28	1713612-CCB2	1713612	8/1/2017 2:00:00PM
29	1720355-01	B[H0138	8/1/2017 2:00:00PM
30	1720356-01	B[H0138	8/1/2017 2:00:00PM
31	1720488-01	B[H0138	8/1/2017 2:00:00PM
32	1720664-01	B[H0138	8/1/2017 2:00:00PM
33	1720665-01	B[H0138	8/1/2017 2:00:00PM
34	1720813-01	B[H0138	8/1/2017 2:00:00PM
35	1720814-01	B[H0138	8/1/2017 2:00:00PM
36	1720981-01	B[H0138	8/1/2017 2:00:00PM
37	1713612-CCV3	1713612	8/1/2017 2:00:00PM
38	1713612-CCB3	1713612	8/1/2017 2:00:00PM

Date	Time	Sequence #:	Result	Qualifier	Units	Dil	MDL	MRL	Rpt	Recovery & RPD
Sequence # 1713612										
Sample ID:		1713612-ICV1	Sequence Sample # 1							
SM4500SDw Diss Sulfide		0.48731	mg/L	1.00					Y	97.5
SM4500SDw Total Sulfide		0.48731	mg/L	1.00					Y	97.5
Sample ID:		1713612-ICB1	Sequence Sample # 2							
SM4500SDw Diss Sulfide		0.0000	mg/L	1.00					Y	
SM4500SDw Total Sulfide		0.0000	mg/L	1.00					Y	
Sample ID:		B[H0134-BS1	Sequence Sample # 3		Batch # B[H0134					
SM4500SDw Total Sulfide		0.49569	mg/L	1.00	0.050	0.10			Y	99.1
Sample ID:		B[H0138-BS1	Sequence Sample # 4		Batch # B[H0138					
SM4500SDw Diss Sulfide		0.49569	mg/L	1.00	0.050	0.10			Y	99.1
Sample ID:		B[H0134-BLK1	Sequence Sample # 5		Batch # B[H0134					

3/2/17 8:51	Sequence #:	1713612	Result	Qualifier	Units	Dil	MDL	MRL	Rpt	Recovery & RPD
Sample ID: B[H0134-BLK1	Sequence Sample # 5		Batch # B[H0134							
SM4500SDw Total Sulfide	0.0000		mg/L	1.00	0.050	0.10	Y			
Sample ID: B[H0138-BLK1	Sequence Sample # 6		Batch # B[H0138							
SM4500SDw Diss Sulfide	0.0000		mg/L	1.00	0.050	0.10	Y			
Sample ID: 1720405-01	Sequence Sample # 7		Batch # B[H0134							
SM4500SDw Total Sulfide	0.0054		mg/L	1.00	0.050	0.10	Y			
Sample ID: B[H0134-DUP1	Sequence Sample # 8		Batch # B[H0134		Source ID: 1720405-01					
SM4500SDw Total Sulfide	0.0040500		mg/L	1.00	0.050	0.10	Y			
Sample ID: B[H0134-MS1	Sequence Sample # 9		Batch # B[H0134		Source ID: 1720405-01					
SM4500SDw Total Sulfide	0.39654	Q03	mg/L	1.00	0.050	0.10	Y		79.3	
Sample ID: B[H0134-MSD1	Sequence Sample # 10		Batch # B[H0134		Source ID: 1720405-01					
SM4500SDw Total Sulfide	0.40073		mg/L	1.00	0.050	0.10	Y		80.1	1.05
Sample ID: 1720405-03	Sequence Sample # 11		Batch # B[H0134							
SM4500SDw Total Sulfide	0.0027		mg/L	1.00	0.050	0.10	Y			
Sample ID: 1720405-04	Sequence Sample # 12		Batch # B[H0134							
SM4500SDw Total Sulfide	0.0014		mg/L	1.00	0.050	0.10	Y			
Sample ID: 1720405-05	Sequence Sample # 13		Batch # B[H0134							
SM4500SDw Total Sulfide	0.027		mg/L	1.00	0.050	0.10	Y			
Sample ID: 1720405-06	Sequence Sample # 14		Batch # B[H0134							
SM4500SDw Total Sulfide	0.0068		mg/L	1.00	0.050	0.10	Y			
Sample ID: 1713612-CCV1	Sequence Sample # 15									
SM4500SDw Diss Sulfide	0.49569		mg/L	1.00			Y		99.1	
SM4500SDw Total Sulfide	0.49569		mg/L	1.00			Y		99.1	
Sample ID: 1713612-CCB1	Sequence Sample # 16									
SM4500SDw Diss Sulfide	0.0000		mg/L	1.00			Y			
SM4500SDw Total Sulfide	0.0000		mg/L	1.00			Y			
Sample ID: 1720405-13	Sequence Sample # 17		Batch # B[H0134							
SM4500SDw Total Sulfide	0.0027		mg/L	1.00	0.050	0.10	Y			
Sample ID: 1720405-14	Sequence Sample # 18		Batch # B[H0134							
SM4500SDw Total Sulfide	0.018		mg/L	1.00	0.050	0.10	Y			
Sample ID: 1720405-15	Sequence Sample # 19		Batch # B[H0134							
SM4500SDw Total Sulfide	0.023		mg/L	1.00	0.050	0.10	Y			
Sample ID: 1720405-17	Sequence Sample # 20		Batch # B[H0134							
SM4500SDw Total Sulfide	0.020		mg/L	1.00	0.050	0.10	Y			
Sample ID: 1720548-01	Sequence Sample # 21		Batch # B[H0134							
SM4500SDw Total Sulfide	55	S05,A07	mg/L	100.00	5.0	10	Y			
Sample ID: 1720353-01	Sequence Sample # 22		Batch # B[H0138							
SM4500SDw Diss Sulfide	0.14	A07	mg/L	20.00	1.0	2.0	Y			
Sample ID: B[H0138-DUP1	Sequence Sample # 23		Batch # B[H0138		Source ID: 1720353-01					
SM4500SDw Diss Sulfide	0.13520		mg/L	20.00	1.0	2.0	Y			
Sample ID: B[H0138-MS1	Sequence Sample # 24		Batch # B[H0138		Source ID: 1720353-01					
SM4500SDw Diss Sulfide	4.4676	Q03	mg/L	20.00	1.0	2.0	Y		44.7	
Sample ID: B[H0138-MSD1	Sequence Sample # 25		Batch # B[H0138		Source ID: 1720353-01					
SM4500SDw Diss Sulfide	4.5236	Q03	mg/L	20.00	1.0	2.0	Y		45.2	1.25
Sample ID: 1720352-01	Sequence Sample # 26		Batch # B[H0138							
SM4500SDw Diss Sulfide	0.054	A07	mg/L	20.00	1.0	2.0	Y			
Sample ID: 1713612-CCV2	Sequence Sample # 27									
SM4500SDw Diss Sulfide	0.49569		mg/L	1.00			Y		99.1	
SM4500SDw Total Sulfide	0.49569		mg/L	1.00			Y		99.1	
Sample ID: 1713612-CCB2	Sequence Sample # 28									
SM4500SDw Diss Sulfide	0.0000		mg/L	1.00			Y			
SM4500SDw Total Sulfide	0.0000		mg/L	1.00			Y			
Sample ID: 1720355-01	Sequence Sample # 29		Batch # B[H0138							
SM4500SDw Diss Sulfide	0.027	A07	mg/L	20.00	1.0	2.0	Y			
Sample ID: 1720356-01	Sequence Sample # 30		Batch # B[H0138							
SM4500SDw Diss Sulfide	0.11	A07	mg/L	20.00	1.0	2.0	Y			

8/2/17 8:51	Sequence #:	1713612	Result	Qualifier	Units	Dil	MDL	MRL	Rpt	Recovery & RPD
Sample ID: 1720488-01	Sequence Sample #	31			Batch #	B[H0138				
iSM4500SDw Diss Sulfide	0.11	A07		mg/L	20.00	1.0	2.0	Y		
Sample ID: 1720664-01	Sequence Sample #	32			Batch #	B[H0138				
iSM4500SDw Diss Sulfide	0.11	A07		mg/L	20.00	1.0	2.0	Y		
Sample ID: 1720665-01	Sequence Sample #	33			Batch #	B[H0138				
iSM4500SDw Diss Sulfide	0.14	A07		mg/L	20.00	1.0	2.0	Y		
Sample ID: 1720813-01	Sequence Sample #	34			Batch #	B[H0138				
iSM4500SDw Diss Sulfide	0.11	A07		mg/L	20.00	1.0	2.0	Y		
Sample ID: 1720814-01	Sequence Sample #	35			Batch #	B[H0138				
iSM4500SDw Diss Sulfide	0.35	A07		mg/L	20.00	1.0	2.0	Y		
Sample ID: 1720981-01	Sequence Sample #	36			Batch #	B[H0138				
iSM4500SDw Diss Sulfide	1.2	A07		mg/L	5.00	0.25	0.50	Y		
Sample ID: 1713612-CCV3	Sequence Sample #	37								
iSM4500SDw Diss Sulfide	0.49569			mg/L	1.00			Y		99.1
iSM4500SDw Total Sulfide	0.49569			mg/L	1.00			Y		99.1
Sample ID: 1713612-CCB3	Sequence Sample #	38								
iSM4500SDw Diss Sulfide	0.0000			mg/L	1.00			Y		
iSM4500SDw Total Sulfide	0.0000			mg/L	1.00			Y		

Recovery and RPD Out of Control Report

Sample ID	Analyte	Rpt	Qual.	% Rec	RPD	Limits
B[H0134-MS1	Total Sulfide	Y	Q03	79.3		80.00 120.00
B[H0138-MS1	Dissolved Sulfide	Y	Q03	44.7		80.00 120.00
B[H0138-MSD1	Dissolved Sulfide	Y	Q03	45.2		80.00 120.00

Hold Time Out of Control Report

Analyte	Sample ID	Sample Date	Prep Date	Prep Expires	Date Analyzed	Analysis Exp.	SO5 FI
Total Sulfide	1720548-01	7/24/17 15:00	8/1/17 14:00		8/1/17 14:00	7/31/17 23:59	X

Method ID: i376.2 Sulfide
 Instrument: SPEC06
 Run Date: 08/01/2017
 Run Number: 1
 Full XLS File Name: W:\EDS\bcElm\ChartReader\Sulfide\SULFIDE 08-01-17 #01.xls

Mult Factor: 1
 IR Blank Subtraction: 0
 Digits Past Decimal (IR): 5
 Use PTP Below Std1: Y
 Use PTP Below Std2: N

Standards	
Conc	Reading
0	0.000
0.05	0.037
0.1	0.072
0.2	0.148
0.5	0.356
1.0	0.718

Correlation Coefficient: 0.999965637172545

Lab Number	Chart Reading	Instrument Reading	Dilution	Run Date	Run Time	Instrument	Analyst
1713612-ICV1	0.350	0.48731	1	08/01/2017	14:00	SPEC06	DIW
1713612-ICB1	0.000	0.00000	1	08/01/2017	14:00	SPEC06	DIW
B[H0134-BS1	0.356	0.49569	1	08/01/2017	14:00	SPEC06	DIW
B[H0138-BS1	0.356	0.49569	1	08/01/2017	14:00	SPEC06	DIW
B[H0134-BLK1	0.000	0.00000	1	08/01/2017	14:00	SPEC06	DIW
B[H0138-BLK1	0.000	0.00000	1	08/01/2017	14:00	SPEC06	DIW
1720405-01	0.004	0.00541	1	08/01/2017	14:00	SPEC06	DIW
B[H0134-DUP1	0.003	0.00405	1	08/01/2017	14:00	SPEC06	DIW
B[H0134-MS1	0.285	0.39654	1	08/01/2017	14:00	SPEC06	DIW
B[H0134-MSD1	0.288	0.40073	1	08/01/2017	14:00	SPEC06	DIW
1720405-03	0.002	0.00270	1	08/01/2017	14:00	SPEC06	DIW
1720405-04	0.001	0.00135	1	08/01/2017	14:00	SPEC06	DIW
1720405-05	0.020	0.02703	1	08/01/2017	14:00	SPEC06	DIW
1720405-06	0.005	0.00676	1	08/01/2017	14:00	SPEC06	DIW
1713612-CCV1	0.356	0.49569	1	08/01/2017	14:00	SPEC06	DIW
1713612-CCB1	0.000	0.00000	1	08/01/2017	14:00	SPEC06	DIW
1720405-13	0.002	0.00270	1	08/01/2017	14:00	SPEC06	DIW

Method ID: i376.2 Sulfide
 Instrument: SPEC06
 Run Date: 08/01/2017
 Run Number: 1
 Full XLS File Name: W:\EDS\bcElm\ChartReader\Sulfide\SULFIDE 08-01-17 #01.xls

Mult Factor: 1
 IR Blank Subtraction: 0
 Digits Past Decimal (IR): 5
 Use PTP Below Std1: Y
 Use PTP Below Std2: N

Lab Number	Chart Reading	Instrument Reading	Dilution	Run Date	Run Time	Instrument	Analyst
1720405-14	0.013	0.01757	1	08/01/2017	14:00	SPEC06	DIW
1720405-15	0.017	0.02297	1	08/01/2017	14:00	SPEC06	DIW
1720405-17	0.015	0.02027	1	08/01/2017	14:00	SPEC06	DIW
1720548-01	0.397	0.55294	100	08/01/2017	14:00	SPEC06	DIW
1720353-01	0.005	0.00676	20	08/01/2017	14:00	SPEC06	DIW
B[H0138-DUP1	0.005	0.00676	20	08/01/2017	14:00	SPEC06	DIW
B[H0138-MS1	0.161	0.22338	20	08/01/2017	14:00	SPEC06	DIW
B[H0138-MSD1	0.163	0.22618	20	08/01/2017	14:00	SPEC06	DIW
1720352-01	0.002	0.00270	20	08/01/2017	14:00	SPEC06	DIW
1713612-CCV2	0.356	0.49569	1	08/01/2017	14:00	SPEC06	DIW
1713612-CCB2	0.000	0.00000	1	08/01/2017	14:00	SPEC06	DIW
1720355-01	0.001	0.00135	20	08/01/2017	14:00	SPEC06	DIW
1720356-01	0.004	0.00541	20	08/01/2017	14:00	SPEC06	DIW
1720488-01	0.004	0.00541	20	08/01/2017	14:00	SPEC06	DIW
1720664-01	0.004	0.00541	20	08/01/2017	14:00	SPEC06	DIW
1720665-01	0.005	0.00676	20	08/01/2017	14:00	SPEC06	DIW
1720813-01	0.004	0.00541	20	08/01/2017	14:00	SPEC06	DIW
1720814-01	0.013	0.01757	20	08/01/2017	14:00	SPEC06	DIW
1720981-01	0.166	0.23037	5	08/01/2017	14:00	SPEC06	DIW
1713612-CCV3	0.356	0.49569	1	08/01/2017	14:00	SPEC06	DIW
1713612-CCB3	0.000	0.00000	1	08/01/2017	14:00	SPEC06	DIW

WET CHEMISTRY RUNLOG

BC LABORATORIES, INC.		CONC	RESPONSE	IDENTIFICATION #
Reveiwed by: _____ Date: _____		0.05	0.037	S- 080117 0.05
Run ID # (01)	<input type="checkbox"/> W-Hz-Sulfide-376.1 _____	0.1	0.072	S- 0.1
	<input type="checkbox"/> W-Hz-Sulfide-376.2 _____ Sulfide	0.2	0.148	S- 0.2
Analyte: Sulfide	ml Spike: 2.5 mls	0.5	0.356	S- 0.5
Method: 376.2	Conc Spike: 5 mg/L	1.0	0.718	S- 1.0
Analyst: DEW	ml Sample: 22.5 mls	Comments: Made a x20 dilutions on sample due to matrix interference. Jy 08/01		
Date: 08/01/17	Spike ID #: S- 070617 5-			
Time: 14:00	BS1 ID #: S- 5-			
Corr Coef: 0.99996	ICV #: S- 5-			

Lab ID #	Dil	Abs/tit	Result	P/R	Lab ID #	Dil	Abs/tit	Result	P/R
1	ICV	0.350			21	Dup	x20	0.005	0.005
2	ICB	0.000			22	MS		0.161	0.161
3	BS1	0.356			23	M&D		0.163	0.163
4	BLK1	0.000			24	D20352-10	x20	0.002	0.002 ✓
5	20405-1 I	0.004		✓	25	CC12		0.356	
6	Dup	0.003			26	CCB2		0.000	
7	MS	0.285			27	D20355-10	x20	0.001	0.001 ✓
8	M&D	0.288			28	D20356-1C	x20	0.004	0.004 ✓
9	20405-3 I	0.002		✓	29	D20488-10	x20	0.004	0.004 ✓
10	-4 I	0.001		✓	30	D20664-10	x20	0.005	0.004 ✓
11	-5 I	0.020		✓	31	D20665-10	x20	0.005	0.005 ✓
12	-6 H	Ⓟ 0.035	0.005	✓	32	D20813-10	x20	0.006	0.004 ✓
13	CCV1	0.356			33	D20814-10	x20	0.025	0.013 ✓
14	CCB1	0.006			34	D20981-1A	Ⓟ x5	0.169	0.166 ✓
15	20405-13 I	0.002		✓	35	CCV3		0.356	
16	-14 I	0.013		✓	36	CCB3		0.000	
17	-15 H	Ⓟ 0.106	0.017	✓	37	Blank Subtract			
18	-17 H	Ⓟ 0.053	0.015	✓	38	20405-6		0.030	
19	20548-1 D	Ⓟ x100 0.397	0.397	✓	39	-15		0.089	
20	D20353-10	x20 0.005	0.005	✓	40	-17		0.038	

Batch # <u>BLH0134</u>	Batch # <u>BLH0138</u>	Sequence # <u>1713612</u>
20548-1 x100 = 0.000	20356-1 x20 = 0.000	20814-1 x20 = 0.012
20353-1 x20 = 0.000	20488-1 x20 = 0.000	20981-1 x5 = 0.003
20352-1 x20 = 0.000	20664-1 x20 = 0.001	
20355-1 x20 = 0.000	20665-1 x20 = 0.000	
	20813-1 x20 = 0.002	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/25/2017 9:39:35AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

Notes and Definitions

- B Blank contamination. The analyte is greater than 1/2 the PQL/LOQ/CRQL in the associated method blank.
- D The reported value is from a dilution.
- E The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration.
- J The reported value is an estimated value. Results are between the MDL and PQL/LOQ/CRQL.
- U The analyte was not detected and is reported as less than the LOD/MDL or as defined by the client.